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PUBLISHED BY

THE GENERAL ALUMNI ASSOCIATION OF THE UNIVERSITY OF MINNESOTA

VOL. XIII [NOVEMBER 10, 1913] NO. 8

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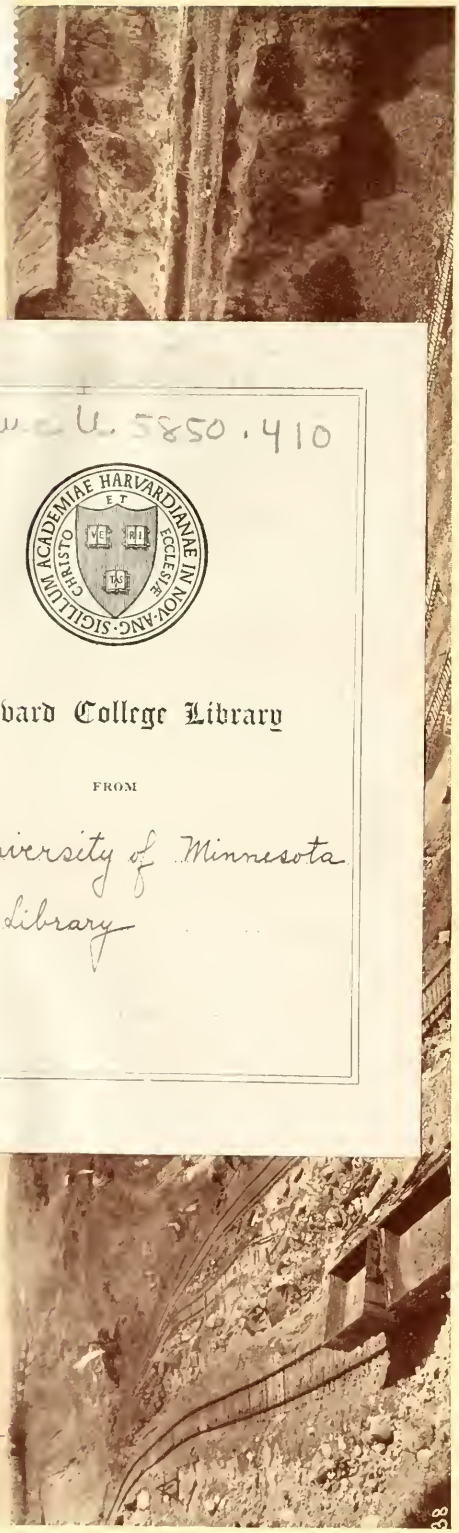

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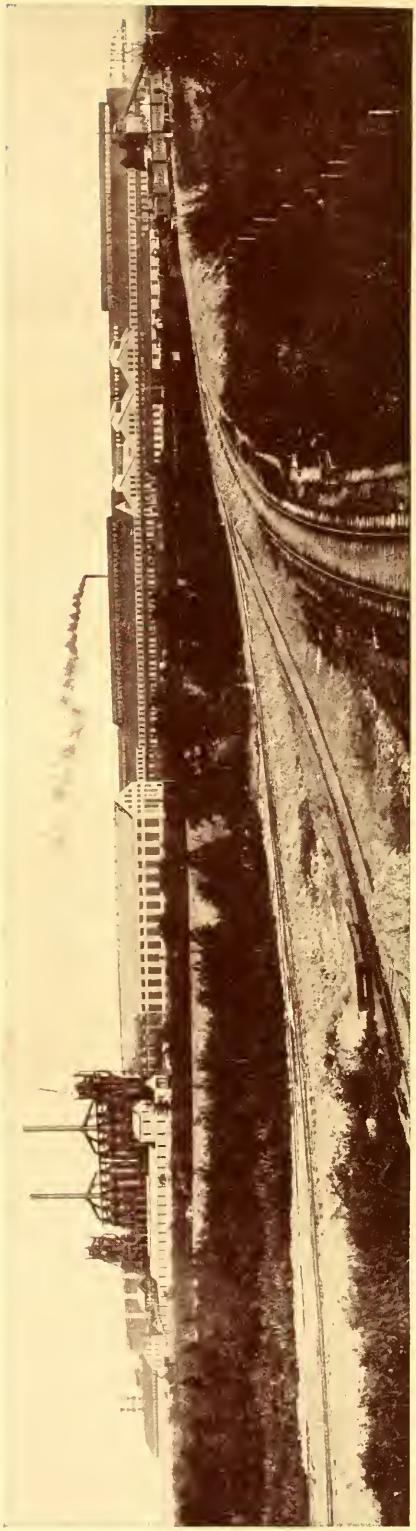

VIEW OF THE NEW UNITED STATES STEEL CORPORATION PLANT AT DULUTH (COPYRIGHTED BY L. P. GALLAGHER)
Rolling of Steel will begin at this plant in 1914. Construction to date has cost $17,000,000, and total cost before operations begin will be about $20,000,000

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THE MINNESOTA ALVMNI WEEKLY

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DULUTH, THE GATEWAY AND NORTHEASTERN MINNESOTA

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At the western end of Lake Superior, where navigation on the Great Lakes gives way to transportation by rail, stands Duluth, a city of 85,000 people. Duluth is the third largest city in Minnesota. It has grown rapidly in recent years and important developments in transportation give foundation to the hopes of its residents that it will some day be the metropolis of the Northwest.

As the point where rails and water meet, Duluth is the gateway to the Northwest. Radiating from the city are fifteen railroad lines traversing an immense territory, within which are included Minnesota's rich iron ore region, a great expanse of territory that has promise of becoming Minnesota's richest farming region, and what remains of the timber that in the past has been one of the great sources of wealth of the North Star state.

DULUTH HARBOR.
From a copyrighted photograph belonging to the Duluth News-Tribune.

Northern Minnesota is truly a land of certainties, and especially does certainty attend development efforts in Northeastern Minnesota. The wealth of the region is immense; the development is going forward rapidly and constantly. Agriculturally, industrially and commercially, Northeastern Minnesota is progressing more rapidly than any other portion of the state or of the Northwest.

A few years ago people scoffed when the suggestion of agricultural production in the cut-over country of Northeastern Minnesota was advanced. The Commercial club of Duluth, basing its action on sound advice and the experience of scattered settlers and city farmers, determined to silence the scoffers by bringing about agricultural development on a large scale. The club obtained an agricultural expert, who set out to direct the efforts of the farmers and to show the results that could be obtained under the prevailing climatic and soil conditions. His work went forward more rapidly than even the enthusiasts had hoped. St. Louis county, of which Duluth is the county seat, has from year to year won prizes on potatoes, celery, head lettuce, forage crops and root crops generally at the Minnesota State Fair. In 1911 twenty varieties of potatoes grown in the vicinity of Duluth were the best potatoes grown in the United States and exhibited at the New York Land Show at Madison Square Garden. In 1912 a bushel of potatoes grown near Duluth captured the L. W. Hill cup offered at the Northwest Land Show at Minneapolis for the best bushel of potatoes grown in the seven states—Minnesota, North Dakota, South Dakota, Montana, Idaho, Oregon and Washington.

Agriculture is no longer experimental in Northeastern Minnesota. Settlers are coming from Iowa, Indiana, Illinois, Southern Wisconsin, Southern Minnesota and other districts where high prices of land prevail, to Northeastern Minnesota where the greatest capital needed is made up of brawn and determination and a willingness to work. The soil deals kindly by the man who works it properly. Crops grow luxuriantly and rapidly. There are more hours of sunshine between May 10 and Sept. 30 in the vicinity of Duluth than at St. Paul, Des Moines or St. Louis. Rainfall is more evenly distributed through the growing season. The soil is rich in properties that provide quick and substantial growth.

Northeastern Minnesota is a land of dairying, for red clover grows wild and all forage crops do well. The old idea that corn could not grow in the northern part of Minnesota has been exploded. Every up-to-date dairy barn now has its silo and every farm has its field of corn. One of the best Guernsey herds in the United States is at the Jean du Luth farm at Duluth and there are various fine herds of pure-bred cattle through Northeastern Minnesota.

The Agricultural College of the University of Minnesota is appreciative of the possibilities of Northeastern Minnesota land.

The new state demonstration farm is now in operation. County agricultural agents are at work in St. Louis, Carlton, Crow Wing, and Koochiching counties, with A. B. Hostetter, formerly agricultural superintendent of the Duluth Commercial club, as district supervisor. The Northeast Experiment Station at Grand Rapids, Itasca county, has played a large part in the agricultural development of the northeastern part of the state, and college extension and farmers' institute workers are received with hearty welcome all through the region.

Duluth is the principal market for the products of the Northeastern Minnesota farms. Up to a few years ago, the city was an importer of farm products. Now it is an exporter. Many thousands of bushels of potatoes are sent out of the territory every year; Northeastern Minnesota head lettuce, celery and cauliflower are in demand wherever people are appreciative of vegetables of unusual quality.

There are many thousands of acres still available for the settler in Northeastern Minnesota, but there is no longer any doubt as to the ultimate agricultural development of the region. The results that have been obtained, the low prices of the land, the undaunted energy of those who are engaged in the efforts to develop the country, make certain a development that will cause the scoffers of a few years ago to hang their heads in shame.

Minnesota's Mineral Wealth.

Mining continues to be the chief industry of Northeastern Minnesota. Agriculture may supplant it in time, but it will not be until after the present generation, at least, has passed. The last report of the state tax commission estimated the mineral wealth of Minnesota at about one and one-half billions of tons of iron ore of all grades. Much of it is of low grade and is not considered very valuable in this day, but processes for the treatment of low grade ores are believed to be practicable and ultimately it is believed that even the ore of very low grades will be merchantable.

Northeastern Minnesota, where agriculture is being developed so rapidly, already contains over one-fourth of Minnesota's taxable wealth. It is a valuable region to the state for it is a large contributor to governmental expenses. St. Louis county alone pays nearly one-fourth of the entire direct state tax. The ore carrying railroads contribute a large percentage of the total gross earnings tax collected by the state.

Minnesota now has three producing iron ranges—the Mesaba, the Vermilion and the Cuyuna. The Vermilion is the oldest, operations having been begun there about twenty-nine years ago. Mining has been conducted on the Mesaba since about 1892, while the development of the Cuyuna range is only a matter of a few years. The underground system of mining is used on the Vermilion and Cuyuna ranges, but on the Mesaba the ore is scooped out of the ground with steam shovels in the great open pit mines. The Hull-Rust mine, operated by the Oliver Iron Mining company at Hibbing, is the largest iron mine in the world.

The mining regions of Minnesota have towns that are models in municipal progress. The schools on the iron ranges are the finest to be found anywhere in the United States. Every town, even though it has only a few thousand people, has paved streets, ornamental lights and buildings that would do credit to towns much larger. The Minnesotan who has not visited the iron mining district has missed a liberal education in the state's resourses and progress.

DULUTH, THE GATEWAY.

The last United States census, taken in 1910, gave Duluth a population of 78,466. The estimate of 85,000, made in this year of 1913, is a most conservative one, for Duluth has made great strides since 1910.

Industrially and commercially Duluth is going forward as rapidly as the agricultural country around it is developing. New industries have been established in the city at the rate of one a month for the last year. Duluth jobbers and manufacturers are reaching out for more and even more territory. Duluth shoes are sold in far-off Alaska. Duluth macinaws are worn from Portland, Me., to Portland, Ore. Log-loading machinery manufactured in Duluth is being operated in the forests of Florida and Alabama and even in South America. Duluth firms have salesmen all through Western Canada and the northwestern part of the United States, and Duluth's commercial interests cover the near-by Northwest completely and efficiently.

Duluth has high ideals and high hopes. It really believes that the day is coming when it will outstrip the Twin Cities and will rival Chicago for the honor of being the metropolis of the West. There is every reason to believe that it has just started on its great growth.

Heretofore practically all of the iron ore mined in Minnesota has been shipped out of the state for manufacture. It will not be so in the future. The United States Steel Corporation will begin the manufacture of steel in Duluth within another year. The corporation has already appropriated $17,000,000 for the steel plant at Duluth and a large part of the money has been expended. On the banks of the St. Louis river, the big buildings loom up to confound skeptics and to cheer the hearts of those who had faith in the promise of the corporation to establish the big plant in Minnesota. The present plant is believed to be only the first unit of the industry. Following in the wake of the steel plant other industries will come. The Universal Portland Cement Company has already begun the erection of a plant in Duluth.

Duluth's commercial scope will be broadened when the steel plant and allied industries are in operation, but Duluth depends not so much on that great new industry as upon the transportation changes that have been made and are in prospect for the future. Duluth has always had its strategic location at the head of lake navigation, but it has not always had the benefit of that location. Before the days of governmental regulation of railroads and official frowning on preferences, the railroads of the Northwest began to ignore the rights of Duluth through its location. They were engaged in building a great commercial center at the Twin Cities, and one of the foundations in that construction was the water competition existing at Duluth.

Four years ago the Commercial Club of Duluth made a survey of the railroad rate situation, and especially the lake-and-rail rates. It found that Duluth had been deprived of its natural advantages and that the Commercial Head of the Lakes had been removed from its geographical location to an artificial location at the Twin Cities. The Traffic Commission of the Commercial Club took the case to the Interstate Commerce Commission. Fourteen months after the case had been submitted, the length of time indicating the careful consideration given by the commission, the decision was handed down. It upheld Duluth's contention and ordered a new adjustment of lake and rail rates that is a benefit not only to Duluth but to every other community in the Northwest outside of the Twin Cities.

The commission held that though Duluth is 96 miles farther by water from Buffalo than is Chicago, Duluth is entitled to the same rates from the east as Chicago. The railroads were ordered to cease discrimination against Duluth and in favor of the Twin

Cities. Several small Minnesota cities joined Duluth in the action, and the commission declared that "the present adjustment works an undue discrimination against them." Duluth won on almost every point, and won not only for itself but for other communities in the Northwest.

Duluth is determined to obtain an equitable adjustment of rates, and especially is it determined to have the Great Lakes waterway opened to all the people of the Northwest on an equitable basis. In attacking the rate structure readjusted under the recent decision, it was not actuated by jealousy or animosity toward the Twin Cities, but purely by the desire to see Duluth get its rights and to have the benefits of the Great Lakes extended to all communities on an equitable basis.

The people of Duluth hope that the people of the Northwest will learn properly to appreciate what the Great Lakes mean to them. Without the deep waterway of 985 miles from Duluth to Buffalo the great development that has come to the Northwest would have been impossible. In the last crop year, July 31, 1912, to July 31, 1913, 110,084,173 bu. of American grain of all kinds and 232,313,953 bu. of Canadian grain were sent down the lakes from Duluth. No railroad man would think that the railroad systems of the Northwest could handle such an immense volume of traffic, when under present conditions car shortages are yearly occurrences during the movement of the crops.

Of the total grain movement from Duluth in the last crop year, 92,006,180 bu. were wheat. The average rate from Duluth to Buffalo by lake was 2 cents per bushel. The rate all-rail between the same points is 13.1 cents per bushel, a difference of 11.1 cents per bushel in favor of the lake route. On the shipments of the year the saving in transportation charges was thus $10,322,575.98. On the same basis of figuring there was a saving in transportation costs of $113,488,566.40 on the 33,877,104 tons of iron ore shipped from the port of Duluth in the 1912 navigation season, a saving of $24,295,660.37 on the 8,585,039 tons of coal received at Duluth and of $1,277,860.20 on the 326,118,000 ft. of lumber shipped from Duluth in that season. That immense saving is in addition to the saving effected by the fact that the all-rail rates in the Great Lakes territory are materially lower than the rates under similar transportation conditions for similar distances where the competition of a deep waterway does not exist.

In furtherance of its desire to aid the development of the

Northwest and at the same time increase the use of the Great Lakes waterway, Duluth people are now interested in an action of immense importance. A Duluth creamery company has filed a complaint with the Interstate Commerce Commission, asking that the boat lines be compelled to provide refrigerator facilities for the transportation of butter, eggs and poultry by boat. The all-rail rate on those products from Duluth or the Twin Cities to New York is $1.05. The rate from Duluth, by lake to Buffalo and thence to New York by rail, is 65 cents per 100 pounds, a possible saving of 40 cents per 100 pounds if the pending action is successful. Minnesota last year produced 151,893,924 lbs. of butter, of which 90 per cent moved out of the state, and 70 per cent of that movement went to Buffalo and other eastern points. The total movement to the east was thus about 95,693,172 lbs. If it had taken the lake route, instead of going all-rail, the saving in transportation charges would have been $382,772.68. The fact that the boat lines have heretofore refused to furnish refrigerator facilities may be attributed to the fact that general merchandise boats on the lakes are owned and controlled by the railroad lines with which they are supposed to compete. That is a situation the Duluth people hope also to see corrected in time.

In addition to a saving in rates, transportation by water would lay Minnesota butter, eggs and poultry down in the Eastern markets in better condition than after rail transportation, according to authorities on refrigeration. Consequently, higher prices to the producer would certainly result.

The following table gives an idea of the difference in rates on farm products between the lake and the all-rail means of transportation:

COMMODITY	BUFFALO		NEW YORK		BOSTON		PHIL.		CHICAGO	
	Lake	Rail	Lake	Rail	Lake	Rail	Lake	Rail	Lake	Rail
Wheat, bu.	2	13.1	8.5	15	10	16.2	8.5	13.8	1.5	6
Butter, eggs, per 100 lb.....	39	79	65	105	71	111	59	103	25	44
Green vegetables, per 100 lb.....	21	41	33	55	39	59	33	53	16	22
Potatoes and similar veg. per 100 lb.....	18	35	30	47	33	50	28	45	16	19

(All rates are expressed in cents.)

Duluth is not unappreciative of the responsibilities of its position. As the gateway to the Northwest, it must give service. In all its rate litigation and trade extension work it has held that the development of the country Duluth serves is of just as great im-

portance as the development of Duluth itself. Duluth cannot grow unless the country back of it grows; Duluth's growth will be of benefit to the Northwest. The interest of Duluth and the Northwest are mutual. Every settler brought into the Northwest is an addition to the consuming capacity of Duluth's trade territory. Every rate change that will increase the volume of traffic through Duluth will be an aid to Duluth. Duluth does not want the great waterway of the Great Lakes to itself. It wants the cheap means of transportation used by everybody within reach of the Great Lakes.

The markets of the East must look to the West for supplies. The East cannot produce a sufficient amount of farm products to supply the densely populated centers. Cheap transportation on the Great Lakes is an economic saving shared in by all the people.

The volume of traffic on the Great Lakes is now heavy. The port of Duluth alone handled 41,000,000 tons of freight in the season of 1912. The development of traffic has been gradual and steady. In 1900 the movement of freight through the Duluth harbor was only a little over 14,000,000 tons. Every year has shown a substantial increase, and unless all theories of economy are unsound, every year will continue to show an increase ad infinitum. The Northwest is developing rapidly. There is no appreciable limit to its possibilities of production and receipt of tonnage.

While discussing the Great Lakes it is always well to remember that they must be considered in a class with the ocean routes, rather than with the shallow artificial canal. The Great Lakes needed only a comparatively small amount of attention from the national government to complete a deep water highway nearly 1,000 miles in length from Buffalo to Duluth. The artificial canal with its shallow depth, topograhical obstacles and excessive transshipment costs for small cargoes and short distances, is not to be compared with the Great Lakes as an economic factor. While the students of transportation are at variance over the value of artificial canals, and many eminent authorities declare that the artificial canal, or even the canalized river of shallow depth, cannot compete with the railroads in the United States, there is no doubt as to the dominant position of the Great Lakes as a transportation factor in the territory they serve.

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THE MINNESOTA ALVMNI WEEKLY

VOLUME XIII NOVEMBER 10, 1913 No. 8

SPECIAL UNIVERSITY DICTIONARY NUMBER

This is the regular issue of the Weekly for November 10th, 1913. This issue contains full information about the University —its past and present. Everyone who has ever been connected with the faculty or otherwise officially connected with the University is listed in this dictionary and the biographical information given is as complete as it has been possible to make it. Over fifteen hundred persons are listed. The information concerning the University, organizations, events, etc., has all been gathered from the most reliable sources and has been checked in every possible way to eliminate errors. It is hoped that the information may be of interest to every subscriber to the Weekly and that subscribers generally will preserve this number and keep it where they can refer to it from time to time during the coming years. Form the habit of turning to this dictionary when you want information about the University or anything connected with its past history. The chances are good that you will find what you are looking for.

We tried to secure a picture of every member of the faculty holding the rank of assistant professor or higher rank; the fact that a considerable number are not included should not be charged against the Weekly. Some professors begged to be excused and some neglected it until it was too late.

We request anyone who finds any error of any sort in this book to report the same.

Subscribers will readily recognize the fact that this number must have cost a lot of money. Our advertisers have made it possible to furnish it without extra expense—remember this when you make purchases and don't forget to tell them you saw their advertisement in the Weekly. It helps a great deal and it doesn't cost a cent.

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THE MINNESOTA ALUMNI WEEKLY

¶Published by the General Alumni Association of the University of Minnesota. ¶A life subscription is $25 paid at one time. ¶The annual subscription price $2. ¶A discount of 25c is allowed for payment before October 15th. ¶Loose money sent in payment of subscriptions is at the sender's risk. ¶Unless subscribers direct a discontinuance it will be assumed that a renewal of subscription is desired. ¶Entered at the postoffice in Minneapolis as second class matter. ¶Address all communications to the Minnesota Alumni Weekly, 202 Library building, University of Minnesota, Minneapolis.

E. B. JOHNSON, 88, *Editor and Manager.* EDWARD D. ANDERSON, '13, *Advertising*

¶The General Alumni Association is an organization of alumni and former students of the University of Minnesota members and former members of the regents and faculty are entitled to become honorary members. ¶Its object is to unite the alumni in the service of the University. ¶The business of the association is managed by a board of directors chosen by the separate college alumni organizations—each college is represented by two directors.
¶The board is constituted as follows: ¶The college of science, literature and the arts—Gratia A. Countryman, '89, Ima Winchell Stacy, '88. ¶The college of engineering and the mechanic arts—William I. Gray, '92 and Harry E. Gerrish, '05. ¶The department of agriculture—D. A. Gaumnitz, '04 and John A. Hummel, '99. ¶The college of law—Hugh V. Mercer, '94 and Kay Todd. '00. ¶The college of medicine and surgery—Soren P. Rees, '97 (Acad. '95) and Chas. W. Bray '95 (Acad. '91). The college of homeopathic medicine and surgery—Asa J. Hammond, '96 (Acad. '91) and Albert E. Booth, '99. ¶The college of dentistry—Thomas B. Hartzell, '93 (Med. '94) and Frank E. Moody, '96. ¶The college of pharmacy—Arthur G. Erkel, '02 and Manley H. Haynes, '11. ¶The college of education—Conrad G. Selvig, '07 and Paul C. Higbie, '07. ¶The school of chemistry—Frank W. Emmons, '99 and Edward J. Gutsche, '04. ¶The school of mines—Merton S. Kingston, '04 and Alfred Y. Peterson, '08. Ex-officio—Henry F. Nachtrieb, '81, president; Horace Lowry, '00, Vice President; Charles F. Keyes. '96, Law '99, treasurer; E. Bird Johnson, '88, secretary.

JOHN S. PILLSBURY
"Father of the University"

Brief Historical Sketch.

For completer history of the University, see Forty Years of the University of Minnesota.

The University of Minnesota was originally organized by the legislature of 1851, under date of February 13th. It was reorganized February 14th, 1860, and again in 1864, and dates its real beginning from the reorganization of February 18th, 1868, the date of its actual beginning as an institution of learning. The whole period from 1851 to 1868 might well be ignored were it not for the fact that some things were done during that period which have had great influence upon the later history of the University.

Old Academy Building in the Foreground

The following is a very brief history of that period. The location of the University was fixed at or near the Falls of St. Anthony, and a gift of land, about four acres, from Franklin Steele was accepted. This land was located near the intersection of University and Central avenues. A building was erected upon this land, at a cost of about $2,500.00, raised by voluntary subscription. The building was erected and for many years was known as the "Preparatory Department of the University of Minnesota." School was opened in this building by the Rev. Elijah W. Merrill, November 26th, 1851, with an enrollment of twenty. Mr. Merrill received his pay from tuition and likewise paid for all assistance and other expenses. The school was discontinued in 1853, and though the regents allowed several other persons the use of the building for private school purposes, little was accomplished.

On the 19th of February, 1851, Congress granted the University two townships of land, 45,257.39 acres, for an endowment. This land was located and some stumpage was sold.

In 1854 the regents purchased twenty-five and one-third acres of the present campus for $6,000 paying for the same with $1,000 borrowed money and notes for the balance. The legislature of 1856 authorized the regents to borrow $15,000 on the site purchased for $6,000.00. This money to be used to take up notes and erect a building.

The regents did not follow instructions but undertook the construction of one wing of the Old Main at an estimated cost of about $50,000.00, expecting to pay for the same by sale of stumpage. A combination of hard luck and hard times came upon the regents. Stumpage could not be sold and interest charges mounted at the rate of 2 per cent a month. Before the debts were finally settled, the new site and building had cost about $125,000.00. We can hardlv appreciate the desperate state of affairs at that time. The legislature of 1860 met and a reorganization was effected. But the powers of the new board were not sufficient to allow the tangled affairs of the University to be straightened out, and in 1864 the legislature named three men—John S. Pillsbury, O. C. Merriman and John Nichols, a board of regents with special powers to sell lands and pay debts. After three years of strenuous service, this board was able to report that practically all debts had been paid and a little less than fifteen thousand acres of land had been sold. 15,410.85 acres were finally sold for this purpose.

The legislature of 1867 made an appropriation of $15,000 for repairs on the building and to begin instruction. A faculty of three was employed and instruction in preparatory subjects offered and about fifty students were enrolled.

The following year the legislature reorganized the University and the real history of the University as an institution of learning was begun.

Three other matters settled during this period deserve mention. When the state was admitted to the Union in 1857 the enabling act gave the state 45,661.14 acres of land for the use of a state university. The regents attempted to secure these lands but it was not until 1870 that the contention of the University was conceded and the lands secured.

The charter of the University adopted in 1868 gave the University the lands, 94,429.38 acres, which had been made over to the agricultural college located at Glencoe. This is one of the most important results attained during this period.

The few attempts to maintain a school in the west wing of the Old Main building were failures. For only one of these were the regents sponsors and then the school lasted less than six months. The other attempts were made by individuals who were allowed the free use of the building for the purpose.

The Administration of President Folwell.

Instruction in preparatory subjects was offered for two years, 1867-68, and 1868-69. In the summer of 1869 a University faculty made only through overcoming difficulties that seemed almost insuperable. It was not until 1881, three years before the close of President Folwell's administration, that the legislature came to recognize the importance of the University and made an appropriation of $180,000, running through a period of six years, for the purpose of providing for the construction of additional and much needed buildings. June 19th, 1873, marked the graduation of the first class to complete the full four year's work in the University. On that day were graduated William Clark Eustis and Henry Martyn Williamson, who both received the degree of bachelor of arts.

The legislature of that same year appropriated $50,000 for the completion of the Old Main building and the erection of an

New Campus View—Artist's Sketch—Washington Avenue

of nine members, with Dr. William Watts Folwell as president, was elected. This faculty included the three who had previously been in charge of the preparatory school. The University began its actual work of instruction, September 15th, 1869. The preparatory school had settled for all time the question of co-education. Young women presented themselves for admission and were taken in without question. The early years of the administration of President Folwell were largely taken up in working out a plan of organization for the University. In his opening address in the Old Main building, December 22nd, 1869, Dr. Folwell outlined his ideas of what a University should be, emphasizing his feeling that the university should be in the best sense of the word, practical —that is, prepare students for the relations in society in which they will find themselves after graduation. In this address Dr. Folwell said, "There is, as I have said, but one resource—the State must endow the University, and if the State will have the University in its full proportion, let her first count the cost and take the million for her unit."

The early days of this administration were most discouraging and progress was agricultural building. The Main building was completed so that the exercises of commencement of 1875 could be held in it. The agricultural building was completed for the opening of the following college year.

Among the important events of Dr. Folwell's administration was the organization of the geological and natural history survey, the organization of the state high school board to encourage the establishment of high schools, and the organization of the medical department as an examining board. The far reaching effects of the organization of the high school board, particularly, mark its establishment as a matter of unusual importance.

In 1880 there came a crisis in the internal affairs of the University. Up to that time the regents had been accustomed to elect the faculty annually. When the election of that year was held only five of the eleven members were re-elected. It was at that time that Professors Sanford, Pike, Downy, Ormond, Dodge and Benton were brought to the University to fill the places of those who had failed of re-election. This date seems to mark a decided change of sentiment of the legislature toward the University and the following year the larg-

est appropriation ever made up to that time, $180,000, for new buildings, was made.

It is also worthy of note that as early as 1874, Dr. Folwell submitted to the regents a plan for the establishment of courses in agriculture, substantially the same as those adopted by the regents when the agricultural school was established, fourteen years later.

Soon after Dr. Folwell became president, he began agitating the question of more land for the University campus, and appropriations were secured which practically doubled the size of the campus as is was when he came to the University. Later, toward the close of his administration, he earnestly urged the regents to sell the University campus and to move the University bodily to the north shore of Lake Minnetonka where a section of land could be secured. It was also during Dr. Folwell's administration that the Minnetonka fruit farm was established and successful extension work in agriculture instituted.

Despite the discouragements of the early days of his administration, Dr. Folwell was destined to see a change of sentiment on the part of the people of the state before its close. In 1883 President Folwell asked the regents to accept his resignation which had been in their hands for many years previous. The regents accepted his resignation and requested Dr. Folwell to continue in service until his successor was elected, which he did. When the election of Cyrus Northrop to the presidency took place, Dr. Folwell was chosen professor of political science and librarian, positions which he held until his final resignation from the University in 1907.

New Campus View—Artist's Sketch—Medical Group

President Northrop's Administration.

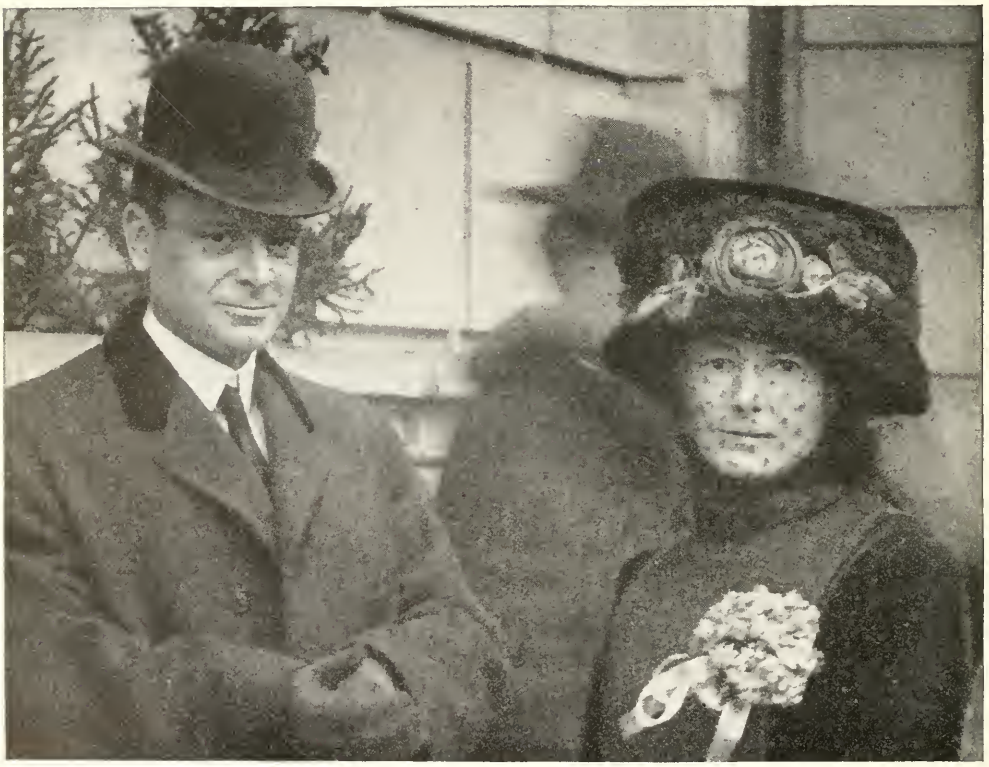
The year 1884-85, the closing of Dr. Folwell's and the beginning of President Northrop's administration, furnishes a natural dividing line in the history of the University. The real dividing line should be 1881, for it was the legislature of that year that put itself on record as favoring a more liberal and far-sighted policy for the University. We take the date first mentioned, however, since it marks a convenient, though not absolutely accurate, dividing line between the old and the new.

The high reputation that President Northrop had won as a college professor was eclipsed by his conspicuous success as an executive. For twenty-six years he was at the head of the University. He began his administration by building upon the solid foundation laid by his predecessor, and, taking the high school board system as he found it, he made much of the possibilities of that system to promote the growth of the University. The marvelous growth of the University during the years of his administration was due in no small measure to the way in which he kept the University in close touch with the high school system of the state.

The first problem to engage the attention of President Northrop was the establishment of an agricultural course to meet the demands that were growing ever more and more insistent. How this was done may be read in another part of this book describing the establishment of the school of agriculture. Associated with this problem of the establishment of a proper system of agricultural education was the problem to retain the institution intact. A desperate effort was made by those who felt that agriculture was not receiving its proper recognition in the University, to have the University dismembered and an independent school of agriculture established. It was about this time, 1887, that President Northrop made his great speech on agricultural education which helped to turn the tide and prevent the dismemberment of the institution. The real crisis in the situation was reached when the legislature of 1887 met; it seemed that nothing could prevent the separation of the agricultural college from the rest of the institution. Governor Pillsbury stepped in and offered to build a science building, now known as Pillsbury hall, and donate it to the state, provided the legislature would

put itself on record as being forever and irrevocably opposed to such separation. The question was settled for all time and it has never been a really live question since that date.

Three years prior to the beginning of the school of agriculture, 1885, the University had discovered Mr. Gregg and had started him on his institute work through the state. This service, rendered the cause of agriculture, undoubtedly had its weight in securing the final settlement of the question of the dismemberment in favor of maintaining the integrity of the institution.



President and Mrs. Vincent

The next great step forward was at the opening of the year 1888-89 when the college of law and the department of medicine with its three colleges, were established. Up to that time the institution had been really nothing but a college of liberal arts in which courses in engineering and agriculture were fostered and had come to have a nominally independent existence.

The problem, for practically the balance of President Northrop's administration, was to keep pace with the rapid growth of the institution and to provide for the ever increasing flood of students that clamored for admission. With an average annual increase of something like two hundred students, the problem was no light one, but President Northrop's wonderful hold on the people of the state, and their faith in him, made it possible to secure from the legislature support, which, though not wholly adequate, served to support the University and to enable it to make some real progress.

Beginning with the year, 1901, there came the creation of the board of control of state institutions, whose history may be found elsewhere in this book. The University was brought under its control. The conditions of dual control were unendurable. The two boards, with the best of intentions to get along harmoniously, could not manage one institution and determined effort was made to have the law repealed. Two years went by and no attempt was made to put the law into force, because it was known that here was a question as to the constitutionality of the law and also it was known that the legislature did not really intend to include the University under the provisions of the law. But when the legislature of 1903 had had the matter up and, through political machinations, had been brought to decide against the release of the University, there was nothing to do but to bow gracefully

to the inevitable and go to work to secure relief at the next session. This was done. The alumni and other friends of the University rallied to the support of Alma Mater and made themselves so insistent that a notable and overwhelming victory was won.

The need of the University for the support of its alumni was clearly demonstrated in 1901. Nobly did the alumni respond. A General Alumni Association, representing all departments of the University, was organized, and the alumni came to know and realize their responsibility for the welfare of the University. This arousing of the alumni in the interests of the University is a mile stone that marked the beginning of bigger and better things.

to secure from the legislature money to secure a much needed addition to the campus. This campaign was likewise successful and the University received an appropriation of $450,000 which was supplemented two years later by an additional appropriation of $350,000 and in addition received contributions from citizens of Minneapolis amounting to $40,000, with which to purchase land practically doubling the size of the campus.

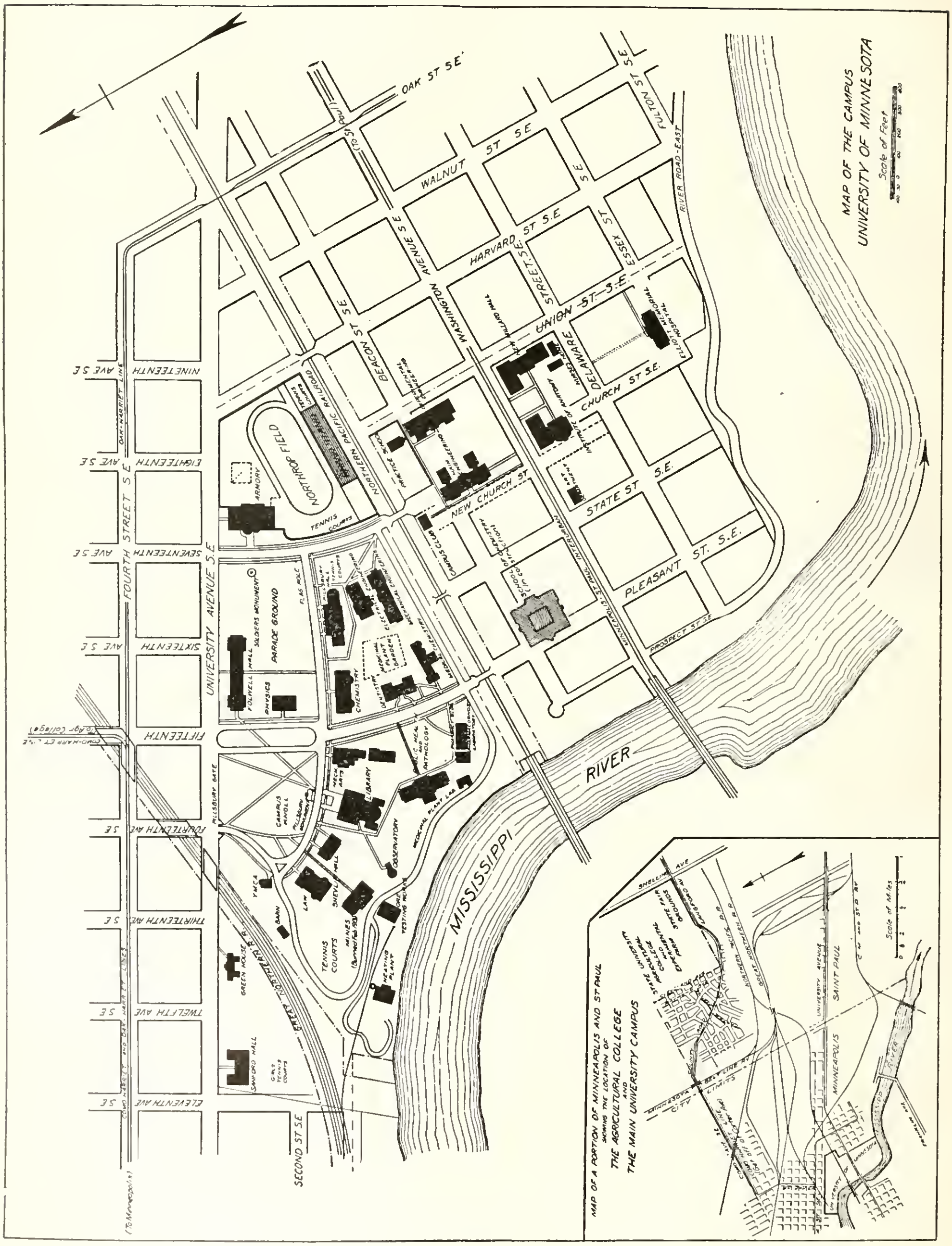
In December, 1909, President Northrop placed his resignation with the board of regents, to take effect when his successor should be elected and qualify. A successor was not chosen until a year later, when George Edgar Vincent, of the University of Chicago, was selected to fill the position.

View of New Campus from South—Artist's Sketch

The rapid growth of the institution had made proper provision for its support practically impossible. Salaries were inadequate and the campus was fast being crowded to its limits. There had been rapidly growing a feeling that a change must be made if the institution was to continue to serve the state as it should. In the year 1907 a determined campaign was made to secure for the University a liberal increase in current expense fund, in order to allow of a material increase in University salaries. The campaign was successful and a general raise of about 30 per cent was made in faculty salaries. This general raise had been supplemented since that date and now salaries average about 50 per cent more than they did prior to 1907. The same year an effort was made

President Northrop remained in charge of the institution until the 1st of April, 1911, when he turned over the institution to his successor.

For two years President Vincent has been in charge. The record of these two years is a wonderful record. President Vincent already enjoys the loyal support of the people of the State. He has been able to bring about many desired changes and has made University extension such a reality that the phrase—"A state-wide campus," seems not unlikely to be realized. It is as yet too early to do more than indicate, as we have in the foregoing statement, that Minnesota has been most fortunate in choosing a successor to President Northrop.


MAP OF THE CAMPUS
UNIVERSITY OF MINNESOTA
Scale of Feet
MAP OF A PORTION OF MINNEAPOLIS AND ST PAUL
SHOWING THE LOCATION OF
THE AGRICULTURAL COLLEGE
AND
THE MAIN UNIVERSITY CAMPUS
MISSISSIPPI
RIVER
OAK ST S.E.
WALNUT ST S.E.
HARVARD ST S.E.
UNION ST S.E.
CHURCH ST S.E.
NEW CHURCH ST
STATE ST S.E.
PLEASANT ST. S.E.
FULTON ST S.E
ESSEX ST S.E
DELAWARE STREET S.E.
WASHINGTON AVENUE S.E
BEACON ST S.E
RIVER ROAD-EAST
NORTHERN PACIFIC RAILROAD
UNIVERSITY AVENUE S.E
FOURTH STREET S.E
SECOND ST S.E
NINETEENTH AVE S.E
EIGHTEENTH AVE S.E
SEVENTEENTH AVE S.E
SIXTEENTH AVE S.E
FIFTEENTH
FOURTEENTH AVE S.E
THIRTEENTH AVE S.E
TWELFTH AVE S.E
ELEVENTH AVE S.E
NORTHROP FIELD
ARMORY
TENNIS COURTS
PARADE GROUND
FOLWELL HALL
PHYSICS
CHEMISTRY
CAMPUS KNOLL
LIBRARY
LAW
MINES
OBSERVATORY
HEATING PLANT
GREEN HOUSE
SANFORD HALL
Y.M.C.A.
CAMPUS CLUB
ELLIOT MEMORIAL HOSPITAL
SAINT PAUL
MINNEAPOLIS
CITY LIMITS

DICTIONARY OF THE UNIVERSITY OF MINNESOTA

Aamodt, A., student instructor in horticulture 1911-12; field assistant in horticulture, 1913.

Abbott, Amos Wilson, clinical professor of diseases of women 1888 to ——; professor emeritus to date. Born in India January 6, 1844; ancestry American; married Helen G. Wright; two daughters, one son. Andover Phillips Academy; Dartmouth; served soldier in the Civil War; practicing physician and surgeon since 1870. Ex-president Hennepin county medical association; Minnesota academy of medicine; Western surgical association; president Minnesota pathological society. Episcopalian.

Abbott, Everton Judson, born October 19, 1849, at Milan, Ohio. B. A., Western Reserve University; M. D., Wooster, Ad eundem Western Reserve. Connected with the medical department of Minnesota since its beginning as professor of clinical medicine and associate professor of practice of medicine to 1910. Professor emeritus to date.

Abbott, Howard S., born at Farmington, Minn., September 15, 1863; son of Rev. Abiel H. Abbott and Mary Strickland Abbott; married Mary L. Johnson; one daughter and one son; professorial lecturer on corporation law since 1897; B. L. '85, Minnesota; managing editor of the Ariel and Junior annual; assistant general solicitor M. & St. L. Ry. Co.; Soo Ry. Co. 1887-90; secretary W. M. & P. Ry. Co., 1888-90; attorney A. T. & S. Fe Ry. Co., 1890-97; special master Union Pacific Ry. receivership 1897-1901; master in chancery, U. S. courts, 1898 to date; director of Minneapolis Trust Co., 1903 to date; has published, "Municipal Corporations" 3 vols., 1907; "Public Corporations," 1 vol. 1908; "Notes and Authorities on Corporations," 1 vol., 2 editions; "Private Corporations," 1 vol. 1911; "Public Securities," 1 vol. 1913; "The Elements of Corporation Law," 1 vol. 1911; case books on both public and private corporations and many magazine articles and public addresses. Member American and state bar associations, commissioner on uniform legislation from Minnesota, 1905-1911; Delta Kappa Epsilon, and Phi Delta Phi. Episcopalian.

Abbott, John S., assistant in surgery 1913-.

Acacia, Kaph chapter. Founded at Michigan in 1904 and established at Minnesota in 1906. Masonic order.

Academic Students' Council, is a representative body elected by the students of the college of science, literature and the arts, to afford a suitable medium for the exchange of opinion between the undergraduates and the faculty and to exercise general supervision over student affairs, and to crystallize and make effective the sanest phases of undergraduate opinion.

Academy of Medicine Fellowship. The Minnesota Academy of Medicine in 1909 (?) made provision for a research fellowship in the college of medicine and surgery, which bears an annual stipend of $250 to $300. The first and only award of this fellowship was to Dr. F. W. Schlutz for the year 1912-13.

Acanthus Literary Society, organized in 1905 by a group of twenty freshmen girls. The programs of the society consist of book reviews, informal debates, original stories and current events, with vocal or instrumental music and frequent social meetings.

Acomb, William E., instructor in drawing, 1902-03.

Adair, Fred Lyman, born Anamosa, Ia., July 28, 1877; son of Lyman J. and Sarah J. Porter Adair; married Myrtle May Ingalls; one daughter. Clinical instructor in obstetrics 1907 to 1913; assistant professor obstetrics to date; B. S. '98; M. D. Rush '01; Michael Reese hospital May 1901 to 1903; Berlin 1909-10; specialist obstetrics and diseases of women since 1910. Research work Erosia portionis vaginalis; Malformations of the female genitalia; syphilis and pregnancy; abortion; infection of umbilical cord; Momburg tube. Has published a large number of articles in professional and technical magazines dealing with the special field of research. Member Hennepin county and state medical societies; the A. M. A.; A. A. A. S., National Geographic society, D. U., Nu Sigma Nu. Plymouth Congregational church.

Adams Bill. The following is the first and essential paragraph of the Adams bill which was approved by the president, 1906:

"Be it enacted by the House of Representatives of the United States of America in Congress assembled, that there shall be, and hereby is, annually appropriated out of any money in the treasury, not otherwise appropriated, to be paid as hereinafter provided, to each state and territory, for the more complete endowment and maintenance of agricultural experiment stations now established or which may hereafter be established in accordance with

the act of Congress approved March 2nd, 1887, the sum of $5,000 in addition to the sum named in said act, for the year ending June 30th, 1906, and an annual increase of the amount of such appropriation thereafter for five years by an additional sum of $2,000 over the preceding year, and the annual amount to be paid thereafter to each state and territory shall be thirty thousand dollars, to be applied only to paying the necessary expenses of conducting original researches or experiments bearing directly on the agricultural industry of the United States, having due regard for the varying conditions and needs of the respective states and territories." This is virtually an amendment to the Hatch bill, under the provisions of which experiment stations were established and by which they have been supported since 1887.

Adams, Chester Roy, scholar in economics and political science 1910 to 1912.

Adams, Elmer E., appointed regent May 31, 1897, and served until elected to the legislature in January, 1905, resigning just before taking his seat as member of the house of 1905. Served as member of the house for 1905 and 1907. Second alumnus of the University to be appointed to the board of regents. Banker, Fergus Falls, Minn.

Adelphian Club includes all junior fraternity men. Its purpose is social activity and interfraternity good feeling.

Adelphic, the oldest of the literary societies of the department of agriculture.

Adkins, Lincoln Kenney, born September 22, 1878, Coal Creek, Tenn.; ancestry English-Irish; m. Annie Dillard Cody; one son. Appointed instructor in mathematics, S. L. & A., August 1st, 1912; A. B. Nashville, '05; S. B. Chicago '09; S. M. Chicago '10; four years experience in high school; one year Carnegie institute, Pittsburgh, Pa. Methodist.

Administration (Main) Building. This building of the department of agriculture is in the form of a "T", 248 feet in length and 145 feet in depth. It is three stories and basement and is of fire proof construction. The material used is brown pressed brick and Bedford stone. A striking feature of the interior is the great stone entrance hall and stairs, finished in polished Kasota marble. This material has been used for the floors and halls throughout the building. The first floor contains the executive offices of the school, college and experiment station, together with library and reading room, as well as seminars and farm accounts room and a beautiful and spacious auditorium and stage, the auditorium and gallery being capable of seating 1,000 people.

The second floor contains the entomological and sewing departments. The entire building is finished in weathered oak and the walls and ceilings in quiet but pleasing colors. The heating is by steam which in combination with a blower system furnishes abundant fresh warm air throughout the building at all times. The lighting is by electricity.

Age Limit. The University regulation regarding the age limit for retiring members of the teaching staff is sixty-eight years. The rule works automatically and it requires direct and positive action by the board of regents to suspend its action in any particular case.

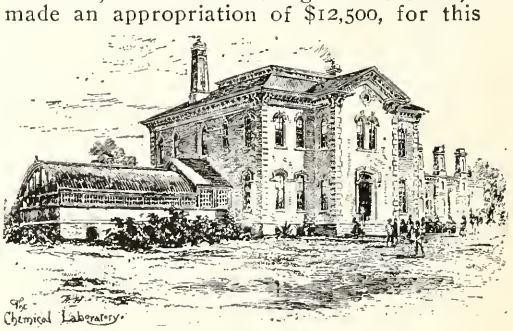
Agrarian, The, was founded by the senior class of 1913 of the school of agriculture. This publication is a senior annual and occupies the same relative place in the life of the school of agriculture as the Gopher does in the student life of the University.

Agricultural Athletic Club. This club was organized at the department of agriculture in the spring of 1913. Its purpose being to manage athletics at the department of agriculture and to serve as an adjunct to the general athletic association of the University.

Agricultural Chemistry Laboratory, erected in 1902, at a cost of $30,000, and in 1904, $5,000 was added in way of equipment. Contains the office of the chemist of the department and the station; laboratories for practice in elementary agricultural chemistry, chemistry of foods and soils and fertilizers and domestic chemistry; work rooms, recitation rooms for classes in chemistry.

Agricultural Club was organized in 1910 and has a membership of 160. Its purpose is to serve as a medium for registering the sentiment of agricultural students; to promote the interest of the students, the college as a whole, and to advance the calling of agriculture. Bi-weekly meetings are held at which there are discussions and social features. Occasional lectures by outside authorities are secured. The club contemplates taking into its membership people outside the University and also the holding of an annual meeting of all members, so as to give the club membership in the Farmers National Congress.

Agricultural College Building. J. W. Bassford, architect. The legislature of 1872 made an appropriation of $12,500, for this



building, which consisted of a main part fifty-four feet square, with two wings, each 25x46 feet. See picture of same. Finished in 1875 and occupied for the first time that

fall. Destroyed by fire December 3, 1888. This building housed the departments of agriculture and the plant house, and chemistry. The main portion only was two stories high.

Agricultural Education. A speech delivered before the State Horticultural society, in the hall of the house of representatives, January 19th, 1887, by President Cyrus Northrop.

Agricultural Engineering building and shops, completed in 1913. The building is used for offices, class rooms, and shops. Is of fireproof construction and cost $260,000.

Agricultural Experiment Stations. The main agricultural experiment station is located at St. Anthony Park and embraces 408.75 acres, and in addition 120 acres are rented for experimental purposes. There are sub-stations at Crookston of 462 acres; at Grand Rapids of 454.6 acres; at Morris of 292.55 acres; at Duluth of 240 acres; at Waseca of 246.02 acres; at Excelsior of 77.89 acres and at Cloquet of 2640 acres. The experiment station was originally established by act of the legislature, approved March 7, 1885, and placed under the control of the Board of Regents. The act carried no appropriation. An act of Congress, known as the Hatch Bill, approved March 2, 1887, appropriated $15,000 annually for the support of the work of investigation and experiment stations established in various states. Minnesota complied with the provisions of the law and since 1887 has received $15,000 annually for the purposes specified. This appropriation was supplemented by the provisions of the Adams Bill, approved in 1906, by which the experiment station received an initial appropriation of $5,000 with an increase of $2,000 a year until a maximum of $15,000 annually was reached. At the present time the state appropriates approximately $150,000 annually to carry on work at these various experiment stations.

The work of the experiment station is carried along in connection with the work of instruction in the department of agriculture and it is impossible to draw a line and say that here the work of one ends and the work of the other begins, for each is dependent upon the other, despite the fact that the experiment station is an independent institution.

The various lines of work carried on at the central station include ten divisions as follows: (1) Dairy and animal husbandry, (2) Agronomy and farm management, (3) Horticulture, (4) Veterinary science, (5) Entomology, (6) Chemistry and soils, (7) Plant pathology and botany, (8) Agricultural engineering, (9) Forestry, and (10) Bureau of agricultural economics research.

The sub-stations located at various points in the state of Minnesota serve a valuable purpose as centers of experimental work relating particularly to the localities which they serve, avoiding as far as possible duplication of work. The stations at Crookston and Morris are operated in connection with the agricultural schools located at those places. The stations at Minnetonka and Owatonna are devoted to fruit and tree culture and breeding. Those at Cloquet and Itasca to forestry investigations.

Library Shevlin Law Building

Agricultural Land Grant. An act of the legislature of Minnesota, passed March 10, 1858, set aside lands in McLeod county for a site for an agricultural college and for an experimental farm. This institution was to be under the control of the president and executive committee of the state agricultural society. In 1861 the state donated to this college all the swamp lands of McLeod county. Nothing was ever done toward organizing a college at this place. The congressional grant of 1863 was accepted and the lands located and, because the affairs of the University were in such unsettled condition, these lands were made over to the agricultural college at Glencoe, in 1866. The following year, the special board of three made a report showing a wiping out of the debt of the University

and 32,000 acres of the territorial grant still untouched. Through the good offices of Regent Pillsbury, then senator, the two grants were consolidated and given to the University. It was provided that the swamp lands granted to the McLeod institution, which amounted to 4,684 acres, should remain in the possession of that institution as an endowment of Stevens Seminary. See Congressional Land Grants.

Agricultural Museums. Practically every division of the department of agriculture has made collections of material that bear upon instruction in that department. These collections are very important and valuable.

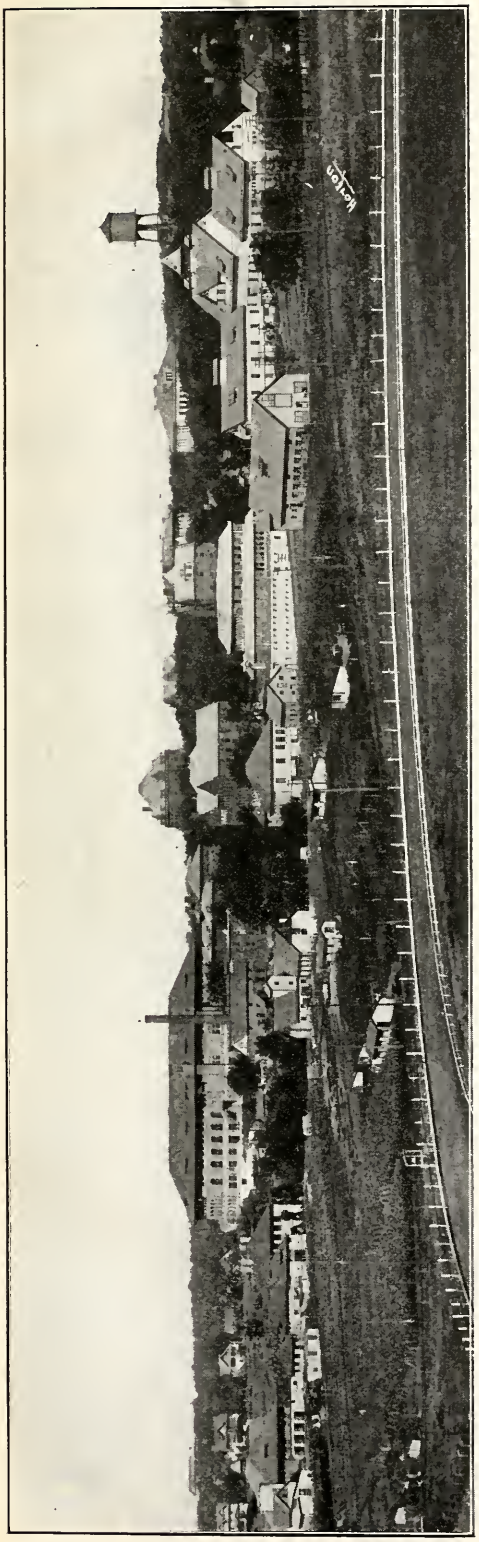
Agriculture, The Department of. The main division of the department of agriculture is located at St. Anthony Park, on a farm of about 420 acres. Other divisions of the department are located at Crookston and Morris, Minn., where schools of agriculture are maintained; and still others at Grand Rapids, Duluth, Waseca, Owatonna, Cloquet, Itasca Park and Lake Minnetonka, where experiment stations and demonstration farms are maintained. Provision for the creation of this department was made in the charter of the University and the College of Agriculture was one of the first colleges to be organized. The first organization, which was intended to be merely tentative and which lasted for but two years, provided for a college of agriculture and the mechanic arts. The reorganization of 1871, established this college as an independent college. Originally the work of this college was the same as for the college of science, literature and arts, up to the end of the sophomore year and the degree of bachelor of agriculture was conferred upon those who completed this course and the two years of special agricultural work of the junior and senior years. It was also provided that "any person not a candidate for a degree, who may appear to be competent to receive instruction, may attend the classes and undergo examinations in any subject, and if successful will receive a certificate to that effect." In addition to the college course, an elementary course, outlined especially to meet the needs of the prospective farmer, was provided. In 1875-76, a special lecture course for men engaged in the practice of farming was offered upon condition that thirty persons signify their intention to pursue the course. This course of lectures was to extend through ten weeks and to be both scientific and practical and no fees, examinations or conditions were prescribed for admission. Special effort was made to secure the attendance of practical farmers upon this special lecure course, and though the course was offered, without restrictions of any kind, for five years, the demand did not justify its being given. In 1881-82, 191 students were enrolled in this course, though the course had to be reduced to six weeks, instead of the ten weeks that had been previously offered. The following year the attendance in this lecture course increased to 281; the total attendance in the other courses in this college having increased to 10. In 1882-83, the attendance of this course increased to 1118.

This large attendance was secured by offering popular lectures upon subjects related to agriculture and home economics.

Then for several years the attendance dropped off entirely and it was not until the year 1885-86, that the catalogue shows any attendance and then an enrollment of but five students in the school of practical agriculture which opened May 1 and closed November 1, the students working on the farm to pay their expenses. The following year this course showed an attendance of fourteen and plans were matured for the organization of the present school of agriculture. With the opening of the year, 1888-89, this school was fully organized and had an enrollment of 47.

GROWTH OF THE DEPARTMENT OF AGRICULTURE

	1888-1889	1889-1890	1890-1891	1891-1892	1892-1893	1893-1894	1894-1895	1895-1896	1896-1897	1897-1898	1898-1899	1899-1900	1900-1901	1901-1902	1902-1903	1903-1904	1904-1905	1905-1906	1906-1907	1907-1908	1908-1909	1909-1910	1910-1911	1911-1912	1912-1913
COLLEGE																									
MEN			5	3	7	7	9	10	14	23	21	23	25	19	14	27	29	45	57	91	148	171	227	205	243
WOMEN													2	2	3	3	3	5	18	26	44	114	204	212	185
TOTAL			5	3	7	7	9	10	14	23	21	23	27	21	17	30	32	50	75	117	192	285	431	417	428
SCHOOL																									
MEN	47	78	104	101	114	144	204	223	265	272	253	327	301	328	358	375	387	381	385	407	452	468	606	598	611
WOMEN							59	46	70	37	60	80	86	122	123	147	143	155	175	173	192	236	281	282	287
TOTAL	47	78	104	101	114	144	263	269	335	309	313	407	387	450	481	522	530	536	560	580	644	704	887	880	898
DAIRY SCHOOL				28	30	59	90	97	91	83	75	73	101	114	82	106	109	87	106	93	107	107	98	96	103
FARMERS' SHORT COURSE													24	33	57	47	121	95	81	141	169	236	203	127	134
TEACHERS' SUMMER SCHOOL																					90	36	38	889	833
COLLEGE SUMMER SCHOOL																								70	92
SUMMER FORESTRY SCHOOL																					18	21	19		
SCHOOL OF TRACTION ENGINEERING																						149	145	38	37
JUNIOR SHORT COURSE																								310	328
SUPERVISORS' COURSE																						3	4		
TOTAL AT UNIV FARM	47	78	109	132	151	210	362	376	440	415	409	503	539	618	637	705	792	768	822	931	1220	1541	1825	2827	2873
SCHOOL AT CROOKSTON																			31	41	101	129	139	159	136
SCHOOL AT MORRIS																							105	91	127



New lines of work have been undertaken, since that date, as follows: 1888-89, Veterinary college organized. This college was abolished in 1892; 1891-92, Dairy School established; 1894, 1895, 1896, Special summer course for women; 1899-1900, Home economics course, in college, organized; 1901-02, Short course for farmers; 1901-02, The intermediate year; 1901-02, Rural school agriculture; 1902-03, Forestry college organized; 1905-06, Northwest (Crookston) school of agriculture, established; 1908, Summer school of forestry; 1908, Summer (college) session; 1908, School of traction engineering; 1909, West Central (Morris) school of agriculture established; 1909, Agricultural extension division established; 1911, State teachers training school; 1911, Junior short course.

For fuller statement, see under proper heading in this issue.

See, also, under Agricultural Experiment Stations.

For a very complete and comprehensive statement of the history and present activities of this department see report of the President of the University, covering the year 1911-12, pages 75-111.

Agriculture, The School of. Minnesota's contribution to education has undoubtedly been greatest in the solving of the problem of agricultural education, through the establishment of the school of agriculture, which has been copied all over the world. As far back as 1879 the Minnesota State Grange began agitating for the establishment of instruction in agriculture suited to the needs of the farmers. A committee was appointed to wait upon the board of regents and to urge immediate action. The committee which met the board, W. S. Chowen, A. M. Bull and J. D. Schofield, did much to bring about a correct solution of the problem. As early as April 20th 1874, Dr. Folwell submitted to the board of regents a report, outlining a course of study substantially that later adopted in the establishment of the school of agriculture. The substance of his contention at that time was, that, "agricultural education ought to be professional education" and he proposed to model such a school after other American professional schools, insisting that agriculture could be so taught successfully. He outlined a course in practical agriculture to be offered during the months when the sons of the farmers would be free to pursue such courses.

During all these years the Grange was pushing for the establishment of a school to teach practical agriculture and Mr. Chowen, in particular, was indefatigible in his efforts in this direction. Professor Edward D. Porter, who was at the head of of the agricultural department at that time was also active in trying to bring about definite results along practical lines. Mr. O. C. Gregg, who was in charge of the farmers' institute work is also to be credited with helping to bring about the establishment of a really successful school of agriculture. The work of the institutes

had been successful from the start, demonstrating the correctness of the contention of those who demanded education in practical agriculture.

At the meeting of the board of regents, April 1, 1887, on motion of Governor Pillsbury, an advisory board of seven members, made up of practical farmers, was created. The function of this board was to be to keep in touch with the agricultural department of the University and to recommend to the regents such action as they deemed advisable. The first board was appointed at the meeting of the regents which occurred on April 7, of the same year, and consisted of Messrs. G. W. Sprague, Canton; D. D. Burnes, Welcome; T. J. Smith, St. Paul; L. H. Stanton, Morris; Wyman Elliott, Minneapolis; S. Harbaugh, St. Paul; D. L. Wellman, Frazee City. At the same meeting the regents voted to direct Professor Porter to consult with this board concerning the estalishment of an industrial school of agriculture and to submit plans for such a school at the following meeting of the board. The board met again on the 13th of the same month, and received a report from the advisory board, as follows:

Resolved: That the board of regents be advised to make such appropriation, as may be necessary to provide suitable accommodations for the students of the school of agriculture on the experimental farm.

"Resolved; That the proposition to establish a school of agriculture on the experimental farm be approved and endorsed by this advisory committee as promising the best possible solution of the problem of agricultural education in Minnesota."

This report was approved and it was voted, at the same meeting, to establish a school of agriculture in conformity with these resolutions, and the executive committee was instructed to erect a building, at a cost not to exceed $10,000, as soon as the funds should be available for the same.

Dr. David L. Kiehle, then superintendent of public instruction, had given the problem much serious study and careful investigation, visiting many manual training schools and agricultural colleges in his search for helpful information bearing upon the question. In a communication in the Farm Stock and Home of February, 1888, he outlined a course of study substantially similar to that later adopted by the regents in establishing a school of agriculture. The essential features being a school to be conducted during the winter months, when the children of the farmers would have leisure to attend; to take those who had had a common school education, and give them a school course mainly objective, manual, practical and scientific, which should fit the student for the duties of life as a farmer. The school opened October 18, 1888, and continued until April 17, 1889, the attendance being 47. See Department of Agriculture. For a number of years past a new development in school work has obtained. Students attending the school do practical work on their home farms, carrying out in practice the theories learned at the school. This work is gradually being more closely supervised and wherever possible, the work is under the personal direction of some member of the staff.

Ahrens, Albert Emil, born November 29, 1877, Minnesota. Educated at high school; medical college; interne, Chicago Hospital. Taught vocal and instrumental music and high school subjects previous to and during medical course; assistant instructor, anatomical laboratory, Hahnemann Medical College, Chicago, 1902; lecturer, Hahnemann Medical College, in Anatomy, 1904-1905; also seven years mercantile experience. Surgical clinics, University, 1905-1907.

Aiton, George B., state inspector of high schools; special lecturer in college of education, 1913.

Albert Howard Scholarship Fund. This fund, of $4,166.81, was given to the University by Mrs. Albert Howard, in 1895, as a memorial to her husband, a pioneer resident of Minneapolis. Mr. Howard always felt great interest in the University and this scholarship, founded by Mrs. Howard, was in recognition of that interest. The scholarship is assigned by the board of regents upon recommendation of the faculty. The income only is awarded and the following named persons have been recipients of payments under the scholarship: 1895, Alexander P. Anderson; 1896, Josephine E. Tilden; 1897, May Bestor; 1898, Marion Potter; 1899, Charles Zeleny; 1900, Ethel C. Brill; 1901, Lillian Cohen; 1902, Clara E. Fanning; 1903, Daniel J. Lathrop; 1904, Gertrude E. Ballard; 1905, Linda Maley; 1906, Ruth J. Sandvall; 1907, Alice M. Stewart; 1908, Mathias N. Olson; 1909, Alfred Davis; 1910, Camelia Waite; 1911, Etheleen Kemp; 1912, Homer Wiltsie Borst; 1913, Sophia Augusta Hubman.

Alcala, Catalina de, instructor in Spanish, 1892-93.

Aldrich, Charles R., instructor in shop work and drawing, and farm buildings, 1892-02.

Aldrich, Henry C., Professor (homeopathic) of dermatology, 1889-94.

Alice Shevlin Hall. So named in honor of the wife of the donor, Thomas Shevlin, was erected in 1906, the cost of the same, $60,000, being provided by Mr. Shevlin. The building is 114x55 feet and is solely for the use of the young women of the University. It is intended that this building shall provide the young women students of the University, a place where they can pass pleasantly and profitably the hours they must spend every day on the campus and yet not in class room. The building is two stories and basement. In the basement are found kitchen and lunch rooms, toilet and cloak rooms. The first floor has a large living room, with fireplace, which

runs through two stories, together with an assembly room, several smaller parlors, and Y. W. C. A. rooms and offices. The second floor provides a large study room, a rest room with fifteen couches, society rooms, the offices of the matron. The building was designed by Ernest Kennedy, Ex-'88, and is constructed of red sand

mold brick with terra cotta trimmings. The interior finish varies in the different rooms but is all very rich and beautiful. The furnishings of the building were provided by the Y. W. C. A., and the Woman's League and their friends.

In 1910, Mr. Shevlin gave $20,000, additional for the construction of an addition to the building to be used as a dining hall. This was constructed the same year and provides sufficient room so that above four hundred can be served in the dining room at one time.

All-American Football Men. Minnesota has had two representatives on Walter Camp's All-American teams—John McGovern in 1909 and James W. Walker, 1910.

Allen, Arthur B. Instructor in operative technics, 1905 to 1907.

Allen, E. L. Instructor in culture and starters, 1906-1908.

Allen, F. Lecturer on veterinary anatomy, 1890-92.

Allen, George D. Instructor in animal biology, 1913.

Allen, William F., born November 11, 1875, Onconta, N. Y.; son Rev. H. H. and Fanny F. Allen; married Augusta A. Nahl; one son. Instructor in histology and embryology since 1911; Stanford University '00; A. M. '02; research work and publications in comparative anatomy and embryology. Member Washington Academy of Science, American association of anatomists, American anthropological association, Sigma Xi.

Allin, Cephas Daniel, born Clinton, Canada, 1876; English ancestry. Instructor political science 1907 to 1911; assistant professor same to 1913; associate professor 1913 to date. A. B. Toronto '07; LL. B. '09, first class honors; A. M. Harvard '00; instructor in political science Leland Stanford '01-'03; lecturer in history Queen's University '06-'07; research, Comparative government and Colonial history; publications, The early federation movement of Australia; joint author Annexation, preferential trade and reciprocity, and various articles in literary and scientific magazines. Fellow of the Royal Colonial Institute; member American political science association.

Allison, John Howard, professor of forestry 1913-

Allport, Frank. Clinical professor of ophthalmology and otology, 1888-97.

All University Student Council. This council was organized in 1911 and its purpose is to serve as a unifying force among the several colleges of the University and to represent the whole student body in all matters affecting student interests. The affairs of the council are managed by a board of fourteen members representing all the colleges and schools of the University.

Alpha Chi Sigma (Chemistry). Founded at Wisconsin in 1902; Beta chapter established at Minnesota in 1904.

Alpha Delta Phi. Minnesota chapter established in 1892. Founded at Hamilton College in 1832.

Alpha Epsilon Iota (Medical sorority). Founded at Michigan in 1890; Epsilon chapter established at Minnesota in 1901.

Alpha Gamma Delta. Sorority founded at Syracuse in 1904; Delta chapter established at Minnesota in 1908.

Alpha Kappa Kappa (Medical fraternity). Psi chapter established 1898. Founded at Dartmouth in 1886.

Alpha Kappa Phi (Legal). Founded at Northwestern in 1902; Zeta chapter established at Minnesota in 1909.

Alpha Kappa Pi. A local fraternity, organized in 1900 and which became Sigma Alpha Epsilon in 1902.

Alpha Kappa Sigma (Engineering). Founded at Minnesota in 1911.

Alpha Omicron Pi. Sorority founded at Columbia in 1897; Tau chapter established at Minnesota in 1912. Successor to Pi Theta Pi, a local organization.

Alpha Phi. Epsilon chapter established in 1890. Founded at Syracuse in 1872.

Alpha Tau Omega. Gamma Nu chapter established in 1902. Founded at Richmond, Va., in 1865.

Alpha Xi Delta. Sorority established in 1907.

Alpha Zeta. LaGrange chapter, Agricultural fraternity.

Altman, Cary Oscar, born Bluffton, Ohio, 1879; ancestry German. Instructor in rhetoric 1912-13. A. B. Otterbein '05; A. M. Ohio State University '12; principal Pandora high school '05-'10; Ottawa high school 1910-11; fellow and assistant in English at Ohio State University 1911-12. Methodist.

Alumni. Graduates of the University, of both sexes, who have received a degree, or, a certificate of completion of special courses not leading to a degree. Ordinarily, and for the purpose of alumni organizations, all persons who have been connected with the Universtiy are considered alumni.

Alumni Button. The design for the alumni button was adopted by the board of directors of the General Alumni Associ-

ation about Commencement time 1909. The design adopted was submitted by the electrical engineering class of 1909. A cut of this design appears herewith.

Alumni Publications. An article upon this subject appeared in the Bookman of May, 1912.

Alumni Day. Since the opening of the University, Wednesday of commencement week has been alumni day. The form of celebration has varied with the years, but the day has always been reserved for the alumni. The plan of handling the program of the day, recently adopted, is to place all arrangements for the day in the hands of a committee from the five-year classes, the representative of the class celebrating its 10th anniversary to be chairman of this committee, with the idea that the 10th-year class should be, in a special way, responsible for the arrangements for the day.

Alumni Organizations. The General Alumni Association, which represents all colleges and departments of the University, and college associations which represent the interests of their respective colleges. All of the colleges and schools of the University, except the graduate school, maintain college alumni organization.

Alway, Frederick James, born Rockford, Ontario, May 28, 1874; English ancestry; m. Eva Cook; four daughters, one son. Professor of soil chemistry and chief of the division of soils, August 1, 1913; B. A. Toronto '94; Ph. D. Heidelberg, '97; professor of chemistry Nebr. Wesleyan, 1898-06; professor of agricultural chemistry Univ. of Nebr., '06-13. Research in reduction of nitro-compounds; preparation of hydroxylamino—and nitroso-compounds; nitroso-esters; electrolytic reduction of nitro-compounds; aromatic nitroso-compounds; bleaching of flour; soils of northern steppes —Prairie soils; humus. Member German Chem. Soc., Am. Chem. Soc., A. A. A. S., Am. Soc. of Agronomy, Baptist.

Amateur Athletics. An article reprinted from the Graduate Magazine of the University of Kansas. See Minnesota Alumni Weekly of April 28, 1913.

American Chemical Society. A local section of the American Chemical Society for Minnesota, with headquarters at the University.

Ancker, Arthur B. Professor of hygiene, 1888-89.

Anderson, Alexander P. Born at Red Wing, Minn. University, B. S., 1894; M. S., 1895. Received his Ph.D. from University of Munich in 1897. Did special work in Missouri Botanical Gardens for three months, then was elected botanist and bacteriologist of Clemson agricultural college, South Carolina. Came to the University as assistant professor of botany in 1899, resigned at end of year to enter business as an inventor and research botanist, in Chicago.

Anderson, Frank Maloy. Born February 3, 1871, Omaha, Neb. Educated at the Minneapolis Academy; B. A., Minnesota, 1804; M. A., 1896; Harvard Graduate School, 1896-97. Employed in a variety of ways while in school; appointed teacher of history in senior year at the University, December, 1893; scholar of history, 1893; instructor in history, 1894; assistant professor, 1898; professor in 1905. In charge of department, 1912-13. Writings (in collaboration with Professor Charles L. Wells) —"Outlines and Documents of English Constitutional History in the Middle Ages (Wilson 1895);" "Constitutions and Documents Illustrative of the History of France 1789-1902 (Wilson 1904);" articles and reviews in The American Historical Review, The annals of the American Academy of Political and Social Sciences, and other periodicals.

Anderson, Minnie. Laboratory assistant in domestic science, 1913.

Anderson, Walter Carl, assistant in drawing, 1911-13.

Anderson, Walter E., scholar in mathematics, 1909-10.

Andrew Lanquist Prize. The Society for the Advancement of the Study of Swedish offers an annual prize of twenty-five dollars to be known as the Andrew Lanquist Prize, in honor of the donor. It is awarded to the student who, during the current year, has received the highest rank in the study of Swedish. The prize was first awarded in 1912 to Ebba Marie Norman. Was not awarded in 1913.

Andrews, The George C. Prize. Mr. George C. Andrews, M. E. '87, offers an annual prize to the senior mechanical engineers for the best essay on any subject connected with heating and ventilation. The first prize in this contest consists of $50.00 in cash accompanied by a suitable medal; the second prize consists of $25.00 in cash accompanied by a medal. The winner of the first prize is offered a position with the George C. Andrews Heating Company.

Andrist, Charles Martin, born Roscoe, Minn., May 22, 1868; Swiss ancestry; m. Emily Luella Miller; one son, two daughters; instructor in French and German, '94-'99; assistant professor of romance languages, '07-'10; professor of French, 1910 to date; B. L. '94; M. L. '97; graduate work at Sorbonne, Paris, two seasons; experience in teaching in country and evening schools, assistant manager Deering Harvester Co., Paris, 1899-05; research in The value of the study of languages on character; A comparison of Holberg and Moliere; The life

of St. Alexis; member National Geographical Society, Modern language association, Beta Theta Pi, Acacia fraternity. Presbyterian.

Angell, James Rowland. Son of President Angell, of the University of Michigan. Born in 1869 at Burlington, Vermont. Michigan, 1890. Graduate student at Michigan and at Harvard, gaining the degree of Master of Arts. Later traveled abroad for study. Enrolled as student at Berlin and Halle, investigating also the work at various other institutions. Mr. Angell began his work at the University of Minnesota as assistant in psychology, in the fall of 1893 and resigned in 1894 to accept a position in the University of Chicago.

Angle, Edward H. Professor of histology and orthodontia, 1888-1891.

Animal Biology Building. The legislature of 1913 provided $200,000 for a new building for the department of animal biology. This building will be located just west of the institute of anatomy building. It will provide also temporary quarters for the department of botany.

Anthropology and Ethnology Museum. The department of sociology has begun a museum for the purpose of illustrating the subjects taken up in that department. A room has been set apart in Folwell hall for the purpose and the foundation for a very valuable collection has already been made.

Appleby, E. V. Assistant in ophthalmology and otology, 1900-1902; clinical instructor in same, 1902 to 1909.

Appleby, Ruby M. Record clerk, office of the registrar since January, 1912.

Appleby, William Remsen. Born in New Jersey. Williams, '86. Made mining and metallurgy a special study in the School of Mines at Cornell, '87. Private assistant to Pierre de P. Ricketts, E. M. Ph. D., Professor of assaying in the School of Mines at Columbia. Assistant in Chemistry in the College of Pharmacy, New York, '89. Accepted a position in the New York Ore Milling and Testing Works; afterward entered the New York office of Messrs. Fraser & Chalmers, making mining and metallurgical machinery a specialty. Called to the chair of Mining and Metallurgy of the University of Minnesota '90. Dean of the school of mines from 1900 to date.

Appropriations—Biennium 1913-14 and 1914-15:

*Maintenance	$966,000.00
Fuel	120,000.00
Special maintenance	462,000.00
Special agricultural maintenance	326,000.00
Buildings and equipment	639,950.00
Agricultural substations	276,500.00
Special, certificate-plan, bill	500,000.00
	$3,290,450.00

*In addition the University receives the proceeds of the 23-100 mill tax levy or $572,500.

Archibald, Grace. Instructor in physical culture for women, 1913-; chaperone West Sanford hall, 1913-14; graduate of department of physical education, Wellesley; A. B., Bates college; taught at Northfield Seminary for girls 1912-13.

Ardley, Henry T., instructor in freehand drawing, wood carving and design, in charge of the school of design, as principal, 1887-94.

Arena, The. Originally this society was devoted mainly to the training of men in debate. In 1902 the plan was changed in recognition of the fact that all men are not born debaters or with a desire to become debaters, and its scope was broadened so as to include various lines of literary activity, making its scope cultural rather than technical.

Ariel, The. This was the first student publication at the University. It was started as a result of a conversation between Professor Willis M. West and John H. Lewis, both men being members of the first board of editors. See Ariel, April 28, 1900. It was started as a monthly, December 1, 1877, and was so continued until 1892, when it became a weekly. Its publication as a weekly was continued until the spring of 1900, the last number being published April 28. It was succeeded by the Minnesota Daily. The Ariel was usually a 16-page and cover publication.

Armory. This building was erected in 1896 at a cost of $75,000. It is two stories high with basement and is built of white brick. The building was designed by Charles R. Aldrich and embodies some of the features of old Norman castles, giving it a decidedly military aspect. It covers 220x135 feet. The building serves as an

assembly hall for large University gatherings on special occasions and for a drill hall. It also shelters the gymnasium for both men and women and provides quarters for athletic teams. It is provided with a main hall which runs through the two stories, with a gallery, which will seat 4,000 persons; and two wings, one of which is used for a gymnasium for men and the other for women. Offices for the officials who have their headquarters in this building are provided. In the basement are baths and toilet rooms, a running track, swimming pool, and in the subbasement a shooting gallery for target practice.

Armstrong, John Milton, born April, 1875, St. Paul, M. D., University, 1901; laboratory assistant, pathology and bacteriology, 1900-1901; member of staff, City

and County Hospital, St. Paul Free Dispensary; first assistant, Health Commission, St. Paul; chairman, Library Commission, Medical Society; member, State Medical Association, American Medical Association. Clinical assistant in genito-urinary diseases, 1905 to date.

Arnold, L. B., president of the American Dairymen's Association, lecturer on dairy husbandry, 1882-83.

Arnold, M. LeRoy, instructor in English, 1904-06. Now professor of English, Hamline.

Arny, Albert Cedric, born at Newport, Minn.; German ancestry; m. Mary Katrina Hummel; one son, one daughter; assistant professor of agronomy and farm management, 1912; B. S. in agriculture '09; seven years experience as superintendent of city schools, operating and managing farm at same time. Research and publications, Alfalfa in Minnesota, Quack grass eradication. Member Am. breeders assn., Am. society of agronomy, Minn. field crop breeders assn.

Arrapahoe, an inter-fraternity organization made up of representatives of the following, Chi Psi, Psi Upsilon, Delta Kappa Epsilon, Delta Tau Delta, Phi Kappa Psi, Sigma Chi.

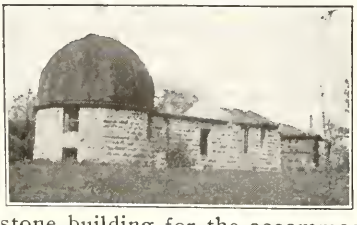
Arrivee, Agnes, instructor in domestic science and preceptress of the Crookston school of agriculture, 1910-1911.

Artisans' Training School. See College of engineering.

Aspelund, Seiler Joseph, clinical assistant in obstetrics and gynecology 1911 to 1913; assistant in gynecology, 1913-.

Association of Alumni Secretaries, organized at Columbus, Ohio, Febrbuary 22, 1913. This association furnishes an opportunity for meeting and exchange of opinions among men who are devoting their whole time to the work of the alumni of the respective institutions represented by them. The first meeting was called by H. S. Warwick, secretary of the Alumni Association of Ohio State University and the first meeting was held in the Union Building on the Ohio State University campus. About twenty-five delegates were present. For fuller report of this meeting see the Minnesota Alumni Weekly of March 3, 1913. Also official published report of the meeting.

Astronomical Observatory, completed in 1892 at a cost of $2,266, and is a small



lime stone building for the accommodation of the telescope, transit circle, astronomical clock, etc. The equipment cost $7,734, making total cost of building and equipment $10,000.

Athenian Literary Society, an organization for both men and women. Organized in 1909.

Athletic Association, The. An organization of persons connected with the University, having for its object the general physical well-being of the students and the encouragement of a proper spirit in favor of hearty, manly sports.

Athletic Emblems for women. On Tuesday, March 18th, 1913, for the first time in the history of the University, athletic emblems were publicly awarded to twenty-four young women students. Eleven members of the freshmen gymnasium team were given a numeral 16 worked inside the letter G on cloth of maroon and gold. Two prizes in the form of pins were awarded to the winner of the skating and swimming contests and numeral badges were given to the basketball teams of the freshman and senior classes, the members of the senior team being given watch fobs in addition—a gold fob for the captain and silver fobs for the other members of the team.

Athletic Field, suggested plan to secure —The Minnesota Alumni Weekly of January 15th, 1912 contains an article upon the need of larger fields for athletics and suggested plans for securing the same.

Athletic Field Day. Almost from the beginning down to about 1897, the annual field day was held during commencement week. These events were often hotly contested and were always interesting, though the fact that there was no one to train the men made the records of little consequence.

Athletic Finances. (Feb., 15, 1912, to Feb., 15, 1913.)

Football: Receipts $32,390.41*, Disbursements $18,980.81, Cr. Bal. $13,409.60.

Basketball: Receipts $2,688.56, Disbursements $5,239.58**, Dr. Bal. $2,551.02.

Baseball: Receipts 0***, Disbursements $1,352.43, Dr. Bal. $1,352.43.

Track: Receipts $830.75, Disbursements $4,911.80**, Dr. Bal. $4,081.05.

Tennis: Receipts 0, Disbursements $487.23, Dr. Bal. $487.23.

Gymnasium: Receipts 0, Disbursements $339.86, Dr. Bal. $339.86.

Miscellaneous: Receipts 0, Disbursements $1,834.61, Dr. Bal. $1,834.61.

Total: Receipts $35,909.72, Disbursements $33,146.32, Dr. Bal. $10,646.20, Cr. Bal. $13,409.60; Total in the treasury, Feb. 15, 1912, $43,664.89; Profit on year's athletics, $2,763.40; Interest on invested funds, $1,117.08; Total in treasury Feb. 15, 1913, $47,543.37; Increase, $3,880.48.

*Minnesota's share of receipts from football games.

**Includes guarantee paid to visiting teams.

***No baseball team in 1912. Intramural baseball substituted.

Athletic "M's" are granted for special excellence in football, base ball, basketball,

track, gymnasium, tennis and wrestling. The requirement for the granting of the "M" varies in different sports. In football, participation in two conference games is required; the same requirement holds for basket ball; in baseball, one full game as a member of the battery staff, or in any other position, participation in one-fourth the innings in conference games. In other sports it depends upon the winning of a first place or two seconds. Tennis requirement winners and runners-up are both entitled to "M."

Athletics, Control of. The athletics of the University are under the supervision of a board of control made up of seven student members, two faculty members and two alumni members. This board has general supervision of all matter connected with athletic contests and the arrangement of the schedules of games and all details connected with the same. The final authority, however, lodges in the faculty committee of five members, created in conformity with a resolution adopted by the board of regents, May 3, 1906. By virtue of the authority conferred upon this committee by the said resolutions, the committee has charge of all tickets and other sources of revenue. An auditing committee, of this committee, has charge of all expenditures and no bills can be paid without its approval. This committee also is vested with power to determine the eligibility of all candidates for participation in athletic contests. The committee also has the veto power over all proposed expenditures by the athletic board of control, and of Northrop field and all grandstands therein. In short, this committee is given full and absolute control of athletics, subject to the revision and ratification of the University Council. See minutes of the board of regents meeting of May 3, 1906.

Athletics, The new. See article by Chester S. Wilson, '08, in the Minnesota Alumni Weekly of January 15th, 1912. Also article by E. B. Pierce, '04, in the Weekly of February 26, 1912.

Atwater, Isaac, St. Anthony, regent 1851-1860.

Atwater, John B., lecturer on the law of real property, 1888-89.

Aurand, William Henry, born June 1875, Oakley, Wis. Central high school, Minneapolis; M. D., University; interne, St. Barnabas Hospital; clinical assistant in medicine, University, 1904 to date.

Aust, Clara L., assistant in domestic science 1912-13; leave of absence 1913-14.

Aust, Franz, assistant in physics 1911-12.

Austin, Edward E., Professor (homeopathic) of diseases of women, (gynecology), 1895 to 1909; professor of homeopathic therapeutics, 1909-11.

Austin, Horace, St. Paul. Regent, ex-officio member, as Governor of the State, 1870 to January 7, 1874.

Austin, Lloyd B., instructor in rhetoric, 1896-98. Now educational director of Y. M. C. A. at Los Angeles Calif.

Austin, Marshall P., Professor (homeopathic) of clinical and orthopedic surgery, 1895-02.

Average Age of Students. The average age of all first year students of collegiate grade, except of the graduate school, is 20.36 years. In the academic college it is 19.38 years; chemistry, 19.41; engineering, 19.91; mines, 20.15; agriculture, 20.38; dentistry, 21.35; pharmacy, 21.99. The following colleges requiring two years of preparatory work have a higher rate, law being 22.09; medicine, 23.06; education, 25.10. As compared with six years ago there has been a slight increase in the average age of men, 1-10 of a year in the average; and a noticeable decrease in the average age of women, the decrease being 36-100 of a year. The average age of students in the college remains practically what it was six years ago. The average age of members of the senior class in the academic college is 23.62.

Azemar, Arnold, instructor in French, 1902-04. Born in England. Early education in France and New Zealand.

President Vincent

Babcock, C. G., assistant in entomology 1911 to date.

Babcock, Charles Kendrick, instructor in English and history, 1890-93; instructor in English, 1893-94. Graduate of the University class of 1889.

Babcock, Orville Gorman, born at Denver, Colo., July 21, 1885; American ances-

try; m. Edith Stella Knoll; one daughter; assistant in entomology, department of agriculture; B. S., '10, Colorado agricultural college; assistant in department of entomology, Maryland agr. college. Publication, Bulletin 161, Maryland Agricultural Experiment Station. Member Association of economic entomologist, Entomological society of Washington, American breeders association.

Babcock, Judge P. M., lecturer on wills and administration, 1888-89.

Babcock, Ruth, nurse Sanford hall 1913-.

Babendrier, F. A., lecturer on (homeopathic) pharmacy, 1903-04.

Baccalaureate Services. The first baccalaureate address was delivered by President Folwell, in 1882, upon "The secularization of education" and the following year, 1883, he delivered the second address, "The genuine university: what and how." There is no record of any baccalaureate service for 1884. In 1885 the custom was revived and a service was held in the First Congregational Church, the program having been arranged by the Rev. John L. Scudder. The date was Sunday evening, June 7th, and addresses were made by President Northrop and Professor Downey, several other University professors participated in the program, in various ways. The following year, May 30th, 1886, a service was held and addresses were made by Rev. John S. MacIntosh and Rev. Joseph Anderson.

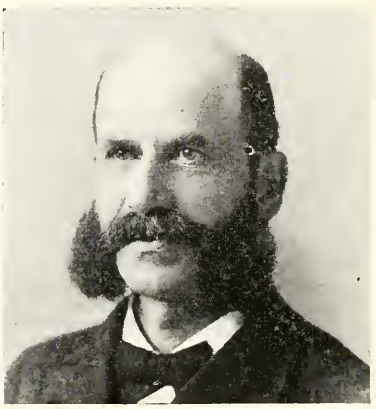
Since 1886 the service has been held annually on the Sunday preceding commencement day. President Northrop has delivered the address for the following named years, 1887, 1888, 1889, 1891, 1892, 1893, 1895, 1896, 1898, 1905, 1906. The addresses for the remaining years have been delivered by the following named gentlemen, 1890, Bishop Whipple; 1894, Bishop Charles H. Fowler; 1897, Rev. C. B. Mitchell; 1899, Dean William S. Pattee; 1900, Professor Frederick J. E. Woodbridge, 1901, Rev. Leavitt H. Hallock; 1902, Rev. Marion D. Shutter; 1903, Rev. William H. Sallmon, president of Carleton College; 1904, Professor Jabez Brooks; 1907, Rev. John W. Powell, '93, the first alumnus to deliver the address upon this occasion; 1908, Rev. H. P. Dewey; 1909, Rev. J. E. Bushnell; 1910, Rev. Andrew Gillies; 1911, Rev. J. E. Freeman; 1912, Rev. Theodore G. Soares, of Chicago; 1913, President Emeritus Cyrus Northrop.

Bachman, Gustav, born January 2, 1878; German ancestry; m. Lotta C. Roosen; two daughters; Phm. D. 1900; Phm. M. '01; laboratory assistant '03 to '09; instructor in pharmacy '09 to 1913; assistant professor of pharmacy 1913 to date. Research work in adulteration of drugs and chemicals and pharmaceutical preparations; articles in the Minnesota state pharmaceutical assoc. proceedings and in the American journal of pharmacy; member Minn. of Am. Pharmac. Assoc., American chemical society, Acacia club, Phi Delta Chi, masonic order; Universalist.

Bacon, Selden, lecturer on civil procedure, including evidence, 1889-1894.

Bailey, Clyde Harold, instructor in agricultural chemistry, 1912 to date; cereal technologist of the experiment station.

Bailey, Charles M., secretary of the college and professor of prosthetic dentistry,



1888-1890; professor of prosthetic dentistry and metallurgy, 1890-91; also orthodontia, 1891-96.

Bainbridge, Mahlon, superintendent of the University farm and instructor in agriculture, 1869-71.

Baker, Ernest Laverne, clinical assistant in medicine, 1911-13.

Baker, George Jacob, born April 9, 1880, Alma Center, Wis.; German and Irish ancestry; m. Julia Anderson. District agricultural director of county work 1911 to date; B. S. agriculture '09; M. S. agriculture '10; taught in common grade and high schools; breeder of shorthorn cattle; assistant in agriculture and on demonstration farms; research, History and development of milking strains of shorthorn cattle in Europe and America, and publications on same. Member Minnesota Livestock breeders association, Alpha Zeta, Y. M. C. A., agricultural club.

Balcom, Alfred Burpee, born Nictaux Falls, Nova Scotia; English ancestry; m. Annie D. Pickels; instructor in economics from 1912-13; S. B., Acadia, '07; A. M., Harvard '09.

Balcom, St. A. D., Winona, regent 1857-1860.

Baldwin, Louis Benedict, born Bemus Point, N. Y., October 27, 1872; Scotch-Irish ancestry; m. Clara M. Winker; one daughter. Superintendent University hospital since 1910; M. D. '97; interne C. & C. hospital, St. Paul, June '97 to '98; two years general practice; assistant physician state hospital for insane, Jamestown, N.

D., '00 to '04; superintendent institute for feeble-minded, Grafton, N. D., '04 to '07; superintendent state hospital for insane Jamestown, N. D., '07 to '10. Member, Hennepin Co. and state medical associations, American medical association, American medico-psychological association; American hospital association, Episcopalian

Ball, Charles R., clinical assistant in mental and nervous diseases, 1897 to ——, clinical instructor to date.

Ballard, Caswell A., instructor in botany, college of pharmacy, 1893-94.

Balmer, Frank E., district supervisor of the county agricultural agent service, took up work early in June 1913; graduate of Kansas agricultural college; three years experience in farming after graduation; later superintendent of county agricultural schools at Onalaska, Wis.

Barber, J. P., assistant in diseases of children, 1899-02.

Barber, Professor, employed by the regents in 1858 at a salary of $800 to open a school in the old main building. Work was discontinued after about six months, the tuition received amounting to less than half the salary of the instructor.

Pillsbury Hall and Chemistry Building

Barnes, Mr., editor of agricultural bulletins, 1911-12.

Barr, John H., born in 1861, at Terre Haute, Ind. He entered the University in 1879, having received his preparatory instruction at Mankato. He graduated with the class of '83 from the mechanical course of the college of engineering. For two years he was employed as mining engineer in the celebrated "Lake Superior" mines. In the fall of 1885 he became instructor in mechanical engineering at the University. Made assistant professor in 1889, and professor in 1890 and resigned in 1891 to accept a position in Cornell.

Barron, Moses, born in Russia, November 8, 1883; B. S. '10; M. D. '11; instructor and demonstrator in pathology and bacteriology, 1912-13; instructor in pathology to date; Member Minnesota pathological society, first vice president Intercollegiate Menorah association; Jewish.

Bartlett, Elizabeth, stenographer, president's office since 1911.

Barto, Alphonso, Long Prairie, appointed regent March 28th, 1895, serving until day of his death, November 5th, 1899. Born at Hinesburg, Vt. 1834. Three years in Civil war. Came to Minnesota in 1867. Member of the legislature in 1871. Lieutenant Governor 1873. Register U. S. Land office, 1889-93.

Barton, George C., clinical instructor in gynecology 1912-13.

Baseball. Information concerning this sport is so meagre that it was thought best to omit all records before that of the season of 1907. Owing to the lateness of the spring and the consequent difficulties of securing the proper training of teams, baseball has never held a large place in student activities.

Record for season of 1907—Minnesota vs. east high, 12 to 0; vs. central high, 7 to 1; vs. south high, 8 to 2; vs. north high, 7 to 2; vs. Macalester, 6 to 3; vs. south high, 12 to 6; vs. Winnipeg, 5 to 6; vs. Iowa, 5 to 0; vs. Notre Dame, 0 to 5; vs. Winnipeg, 1 to 6; vs. Nebraska, 7 to 8; vs. North Dakota, 18 to 2; vs. Fargo Agricultural College, 11 to 0; vs. North Dakota, 7 to 1; vs. Luther College, 2 to 6; vs. Creighton University, 8 to 5; vs. Chicago, 9 to 1; vs. Armour Institute, 3 to 2; vs. Notre Dame, 2 to 1; vs. Chicago, 15 to 9; vs. Wisconsin, 4 to 5.

1908—Minnesota vs. alumni, 14-10; vs. East high school, 13-1; vs. Central high school, 8-1; vs. Concordia, 2-1; vs. Illinois, 2-1; vs. St. Olaf, 5-0; vs. Macalester, 3-1; vs. North Dakota, 3-0; vs. Iowa, 3-2; vs. Iowa, 6-4; vs. Macalester, 6-0; vs. Nebraska, 9-0; vs. Winnipeg, 5-8; vs. Ames, 1-4; vs. Iowa, 4-1; vs. Luther College, 1-1; vs. Wisconsin, 2-3; vs. Chicago, 2-0; vs. St. Viateurs, 6-10; vs. Illinois, 0-16; vs. Luther College, 1-0; vs. Fargo College, 7-0; vs. St. Thomas, 2-1; vs. Wisconsin, 4-0.

1909—Minnesota vs. St. Thomas, 3-10; vs. Macalester, 5-4; vs. Illinois, 2-11; vs. Concordia, 6-1; vs. St. Thomas, 5-0; vs. Nebraska, 0-0; vs. Nebraska, 6-5; vs. Chicago, 2-3; vs. Beloit, 7-4; vs. Wisconsin, 3-4; vs. North Dakota, 4-0; vs. Notre Dame, 4-10; vs. Illinois, 0-16; vs. Notre Dame, 3-2; vs. Notre Dame, 2-1; vs. Wisconsin, 4-5.

1910—Minnesota vs. Concordia, 9-0; vs. Hamline, 12-4; vs. Marquette, 2-4; vs. Macalester, 15-3; vs. Hamline, 2-7; vs. St. Thomas, 7-0; vs. Wisconsin, 4-3; vs. North Dakota, 8-0; vs. Illinois, 2-5; vs. Indiana, 6-0; vs. Chicago, 1-3; vs. Iowa, 3-4; vs. Iowa, 4-1.

1911—Minnesota vs. Alumni, 2-3; vs. St. Thomas, 16-7; vs. Macalester, 5-5; vs. Hamline, 3-4; vs. South Dakota, 4-11; vs. Concordia, 9-0; vs. Macalester, 7-4; vs. Hamline, 6-0; vs. St. Thomas, 8-4; vs. North Dakota, 6-1; vs. Northwestern, 6-4; vs. Wisconsin, 3-5; vs. Illinois, 2-11; vs. Iowa, 2-5; vs. Iowa, 2-0; vs. Chicago, 2-1; vs. Waseda, 3-2; vs. Waseda, 8-2; vs. Iowa, 5-3; vs. Beloit, 3-2; vs. Wisconsin, 1-4.

1912—Schedule cancelled. During the season of 1912 Minnesota was not represented by a team. The conference regulation concerning summer baseball making it impossible to get up a team.

1913—Minnesota vs. Minneapolis Northern League, 5-1; vs. Minneapolis North-

ern League, 3-3; vs. Macalester, 3-2; vs. Minneapolis Northern League, 8-5; vs. St. Thomas, 9-8; vs. Carleton, 2-2; vs. Hamline, 7-8; vs. Wisconsin, 3-6; vs. Chicago, 7-3; vs. Iowa, 7-3; vs. Chinese, 5-15; vs. Hamline, 4-3; vs. Illinois, 3-12; vs. Macalester, 8-7; vs. Iowa, 6-9; vs. Wisconsin, 9-4.

Basketball. Basketball at the University, really began with the students of the school of agriculture, who used to have a winning team in the days before the 'Varsity team was thought of. The first 'Varsity team of which there is record is that of 1897-98. The score cards for the various years tell the tale of development in this line of sport. In 1901-02 the 'Varsity team had a clear title to the college championship of the United States and since that time has been one of the teams to be reckoned with in figuring out the championship of the country.

1897-98—Minnesota vs. Minneapolis Y. M. C. A. triangles 6-18; 11-5; vs. Alphas, 6-23; 6-13; vs. Goalites, 11-7; vs. Picked team, 5-5; vs. Macalester, 11-9.

1898-1899—Minnesota vs. St. Paul Y. M. C. A. 4-28; 9-23; vs. Macalester, 9-7; 9-8; vs. Minneapolis Y. M. C. A., 12-2; 0-2; vs. School of Agriculture, 7-10; 9-20.

1899-00—Minnesota vs. Minneapolis Central, 8-14; vs. Fargo Y. M. C. A., 3-27; vs. St. Cloud Normal, *7-14; 2-32; vs. Iowa, 4-30; vs. Wisconsin, 15-18; vs. Superior Normal, *26-11; *19-15; 7-27; 9-13.

1900-1901—Minnesota vs. Alumni, 31-2; vs. Carleton 12-3; vs. Central high, 27-4; vs. School of Agriculture, 17-4; vs. St. Paul Y. M. C. A., 37-19; vs. W. Superior Normal, 23-5; 12-14; vs. Iowa, 38-5; vs. Fargo Y. M. C. A., 37-7; vs. Fargo College, 26-5; vs. N. D. A. C., 24-5; vs. Wisconsin, 15-3.

1901-02—Minnesota vs. Alumni, 44-11; vs. Sophomores 13-8; vs. Seniors, 18-1; vs. South High, 2-0 (default); vs. Yale, 32-23; vs. East high, 44-4; vs. Central high, 22-5; vs. N. D. A. C., 47-7; 60-9; vs. Fargo high school, 50-4; vs. Fargo college, 56-24; Co. E., Fond du Lac, 22-16; vs. Nebraska, 52-9; vs. Wisconsin, 30-10; vs. Iowa, 49-10.

1902-03—Minnesota vs. Faculty, 44-4; Central high, 42-6; Grinnell, 39-2; Fargo college, *57-11; Fargo high school, *41-20; N. D. A. C., *31-13; Superior normal, *37-10; *44-6; Anoka high school, *37-4; Fargo college, 46-7; Wisconsin, 38-11; Nebraska, 41-4.

1904-05—Minnesota vs. Alumni, 36-18; vs. Holcomb, 61-10; vs. Iowa, 49-17; vs. Nebraska, 21-22; 25-28; vs. Rochester, *41-12; vs. Washington Continental, *27-35; vs. Columbia, *15-27; vs. Co. E. Schenectady, *18-47; vs. Dartmouth, *16-16; vs. Williams, *11-32; vs. Ohio State, *27-25; vs. Purdue, *34-19; vs. Chicago, *22-25; *33-22.

1905-06—Minnesota vs. High school, 27-11; vs. Macalester, 49-9; vs. Holcomb, 47-12; 47-13; vs. Faculty, 27-11; vs. Illinois, 31-19; *27-25; vs. Fargo A. C., 26-15; vs. Wisconsin, *24-31, 16-10; vs. Purdue, *27-25; vs. Wabash, *16-26; vs. Chicago, *31-29; 20-17; vs. Nebraska, 25-16.

1906-07—Minnesota vs. Wisconsin, 18-11, 20-31; vs. Illinois, 42-3, 36-29; vs. St. Thomas, 44-6; vs. All-stars, 25-12; vs. Nebraska, 20-19, 20-18; vs. Purdue, 37-26; vs. Chicago, 24-27, 21-10; vs. Stout, 47-28.

1907-08—Minnesota vs. Stout, 40-12; vs. St. John's, 52-15; vs. St. Thomas, 33-12; vs. Columbia, 9-8; vs. Columbia, 16-11; vs. Iowa, 32-12; vs. Wisconsin, 16-37; vs. Grinnell, 19-25; vs. Iowa, 33-25; vs. Illinois, 15-16; vs. Chicago, 23-26; vs. Wisconsin, 14-34; vs. Nebraska, 43-12; vs. Nebraska, 32-10; vs. Purdue, 34-25; vs. Illinois, 20-22; vs. Chicago, 12-22; vs. Purdue, 2-0 (by default.)

1908-09—Minnesota vs. Ripon, 41-7; vs. Illinois, 18-17; vs. Wisconsin, 13-14; vs. Illinois, 20-21; vs. Chicago, 2-27; vs. Northwestern, 21-16; vs. Nebraska, 24-17; vs. Nebraska, 39-21; vs. Iowa, 16-37; vs. Nebraska, 28-26; vs. Nebraska, 29-21; vs. Wisconsin, 14-37; vs. Chicago, 15-20.

1909-10—Minnesota played 10 games, won 7, lost 3, had an average percent of 700 and stood second in the league.

1910-11—Minnesota vs.

1911-12—Minnesota vs. Illinois, 22-16; vs. Wisconsin, 12-22; vs. Iowa, 39-17; vs. Nebraska, 40-15; vs. Purdue, 16-30; vs. Illinois, 10-13; vs. Indiana, 34-7; vs. Chicago, 23-13; vs. Purdue, 12-24; vs. Iowa, 29-10; vs. Wisconsin, 26-29; vs. Indiana, 26-17; vs. Chicago, 13-27.

1912-13—Minnesota vs. Wisconsin, 11-19; vs. Purdue, 29-27; vs. Illinois, 12-19; vs. Chicago, 9-23; vs. Iowa, 26-10; vs. Illinois, 10-20; vs. Wisconsin, 11-29; vs. Chicago, 16-20; vs. Purdue, 8-23; vs. Iowa, 9-12.

Bass, Frederick A., born in 1875, Hyde Park, Mass. Graduate in civil engineering, Massachusetts Institute of Technology. Four years' experience as assistant engineer on public works of Massachusetts; one year as engineering assistant with the corps of engineers of the U. S. Army; assistant engineer Hering & Fuller, of New York. Instructor in civil engineering, in charge of sanitary engineering, 1901 to 1904; assistant professor of same, 1904 to 1911; professor of municipal and sanitary engineering to date. Author of articles contributed to the engineering press. Member of the American Public Health Association; American Water Works Association; associate member American Society of Civil Engineers; Six O'clock Club.

Bassett, Louis B., born February 24, 1872, in LeSueur county, Minnesota; New England ancestry; m. Zoe A. Wells, one boy and one girl; graduate of the school of agriculture 1896; had two years' work in the college; instructor in agriculture 1907-09; assistant professor farm management 1911 to date. During the time Mr. Bassett was away from the University he had charge of a 10,000 acre farm at Marion, N. D. He returned to Minnesota

May 1st, 1911, to conduct farm management investigations in Minnesota in cooperation with the U. S. department of agriculture. Mr. Bassett's investigations are to determine the actual amount of equipment in stock, machinery, buildings and capital, necessary to carry on farms of different sizes in Minnesota to the best advantage. Under this arrangement the state of Minnesota is divided into six sections, two southern, two central and two northern, several farms being selected in each section for the purpose of compiling necessary data.

Batchelder, George F., Faribault. Regent January 13th, 1861-November, 1863.

Bauer, George Neander, born in 1872 at Jordan, Minn.; German ancestry; m. Bertha Marie Blum; one daughter. Instructor in mathematics '00 to '02; assistant professor '02 to '07; professor '07 to date; B. S. '94; M. S., Iowa, '98; Ph. D. Columbia, '00; University of Gottingen '08-'09; instructor in the University of Iowa, '95-'98. Research and publication upon Parallax of mu. Cassiopeiae and the position of fifty-six neighboring stars; elements of Cantor number theory; some transcendental curves and numbers; simpler elements of analytical geometry; plane and spherical trigonometry; (in process of preparation,) "Infinite series; member American Mathematical society, Circolo Matematico de Palermo, Universalist.

Baumgartner, Edwin A., born February 14, 1887, at Halstead Kansas; Swiss ancestry; Kansas, A. B. '10, A. M. '11; instructor in anatomy University of Wisconsin, 1911-12; instructor in anatomy 1912-13; histology and embryology, 1913-; member Sigma Xi.

Baxter, George N., lecturer on common law and code pleading, 1888-89.

Baxter, R. B., in charge of animal husbandry, Crookston, 1911-1912.

Beach, Elizabeth S., instructor in history, 1899-02. Now Mrs. Willis M. West, of Grand Rapids, Minn. Born in Faribault, Minn., in 1873. Graduate from Faribault high school in 1891, with highest honors. Graduate Minnesota in 1896, as valedictorian. Phi Beta Kappa. Three years' experience as teacher in Faribault high school.

Beach, H. A., assistant in hog cholera serum work and instructor in physiology 1910-11.

Beach, John Parsons, assistant professor of music, 1902-04.

Beach, Joseph Warren, born January 14, 1880, at Gloversville, N. Y.; son of Dr. Eugene and Sarah J. Warren Beach; m. Elizabeth Northrop; one son. Assistant in rhetoric 1900-01; instructor in rhetoric and English 1902-04; assistant professor of English, 1907 to date; B. A., '00; four years graduate work at Harvard; thesis connected with Chaucer and folk lore; author, Sonnets of the head and heart, '02; The comic spirit in George Meredith, '12; member Phi Beta Kappa, Modern Language association of America.

Beadie, William David, clinical assistant in pediatrics 1911-13.

Beadle, The. A class publication issued by the class of 1913 during the second semester of the senior year.

Beal, W. O., assistant astronomer 1913-, with rank of instructor.

Bear, U. S., instructor in cheese making, 96-97.

Beard, Richard Olding., born Dec. 20, 1856, Middlesex, England. M. D. Northwestern University, 1882. Formerly practicing physician and consultant in nervous and nutritional diseases 1888 to 1913, Professor of Physiology, University of Minnesota. 1908 to 1913, Director, Department of Physiology and Pharmacology, University of Minnesota, 1913, Secretary of the Medical School and Associate Professor of Physiology, University of Minnesota. Author of monograms on medical education and on medical and sanitary topics.

Beardsley, Arthur, 1869-72. Member of the first University faculty as tutor. Afterward he was made professor of civil engineering and industrial drawing.

Beaumont, John F., professor (homeopathic) of ophthalmology, 1888-94.

Beavers, The. An organization of men of the school of agriculture, established in the spring of 1911, for the purpose of securing training in parliamentary law and literary activities.

Beck, James F., instructor (homeopathic) in minor surgery, 1897-99.

Beckley, Fred S., assistant (homeopathic) in gynecology, 1903-04.

Beckman, Frederick E., born in Goettingen, Germany, 1865. Received early education at the Royal Gymnasium. Came to America in 1889. Held a position in Illinois Trust and Savings bank seven years. Studied romance languages at Goettingen in 1897, and spent 1898 in Spain. Received Ph. D. from Chicago University in 1899. Came to University as instructor in Spanish and French in the fall of 1899. Resigned in 1901.

Beebe, W. L., instructor in bacteriology, college of agriculture, 1907-08.

Bell, Charles J., born Sommerville, Mass., October 2, 1853. Son of Dr. L. V. Bell. Educated in Chauncey Hall School, Boston; Phillips Exeter Academy, 1872; Harvard, 1876; six years abroad under Bayer and Hoffman in Germany. Professor of chemistry, Pennsylvania State College, several years; fellow at Johns Hop-

kins to 1888. Professor of medical chemistry at University, 1888 to January 3d, 1903, the date of his death. Married December 3d, 1902, to Miss Ragna Hoegh of Minneapolis.

Bell, Elexious T., born Hatch, Mo., August 31, 1880; assistant professor of pathology, 1913-; B. S., Missouri, '01; M. D., '03; studied at Bonn, 1905-06; assistant in anatomy, Missouri, 1902-03; instructor same, 1903-07; assistant professor 1907 to 1913; in charge of department anatomy Missouri 1903-04; research work on Histogenesis of the thymus, experimental morphology, adipose tissue.

Bell, Dr. J. W., Prize. Through the generosity of Dr. John W. Bell, Emeritus Professor of Clinical Medicine and Physical Diagnosis, an annual prize of $100 is offered in the college of medicine and surgery, to the student showing the highest proficiency in physical diagnosis.

Bell, John W., professor of physical diagnosis and diseases of the chest, 1888-1906; emeritus professor, 1906 to date.

Bellows, Henry A., assistant professor of rhetoric, 1910-13.

Bemis, Bessie E., assistant in domestic science, 1911 to date, in charge of division, '11-'12.

Bengtson, J. P., preceptor and instructor, Crookston school of agriculture, 1913.

Benjamin, Arthur E., born Dec. 19, 1868, Hutchinson, Minn. M. D., University; teacher, country schools; farmer, two years; clinical instructor in gynecology, University, since 1901; specialist in gynecology and surgery. Author of "Appendicitis;" "Some problems in gynecological survey;" "Inguinal hernia;" "Ectopic pregnancy;" "Gynecological surgery."

Bennett, Estelle (now Mrs. Boot), was the first general secretary of the Y. W. C. A., and the first general secretary of a college Y. W. C. A. in the United States, 1896-99.

Benson, Jared, Anoka. Regent January 23d. 1861-March 4th, 1864.

Benton, Charles W., born in 1852 at Tolland, Conn.; New England ancestry; m. Elma C. Hixson; two sons; professor of French since 1880; head of department of Romance languages; B. A. '74, M. A. '97, Yale; Litt. D. '97, Western University of Pennsylvania; high school principal '77 to '79; Boston schools '79 to '80; editor college text book of French Plays, '00; Golden Ages of Literature, Dante, '99; speaks six and reads and writes fifteen languages; president of the local branch of the Alliance Francaise; Congregationalist.

Berg, Carl., instructor in farm mechanics, Crookston school of agriculture, 1913.

Berg, Otto I., instructor, Crookston school of agriculture, 1912 to date.

Bergman, Herbert F., assistant professor of botany, 1912 to date.

Berkey, Charles P., scholar in mineralogy, 1892-93; instructor 1893-1904. Now connected with same department in the school of mines, Columbia University, New York City. Graduate of the University, '92, M. S., '98, Ph. D., '97.

Berman, Marie S., clerk, business office, 1910 to 1912.

Bernhagen, John F., instructor in military science, 1901-02. Graduate of the University, class of 1901.

Berry, John M., Faribault, regent February 28th, 1860-January 13th, 1861. Appointed regent in 1868 but declined to serve.

Josephine T. Berry, professor of nutrition and head of division since 1913; A. B. Kansas '96; B. S., Columbia, '04; graduate student at Chicago, 1904-05; research scholar at Columbia, 1909-10; A. M., Columbia, '10; graduate student in nutrition at Yale, 1910-11; for a time superintendent of schools at Waterville, Kansas, and later instructor in the department of household administration, Chicago; head of the department of domestic science in the Northern Illinois state normal school; head of the department of home economics in the State college of Washington at Pullman, Wash., 1911-13.

Bertin, Emma, born Saint-Quentin, France. Educated at private schools in Saint-Quentin and Paris, also Academie de Paris. Teacher, private schools in England, 1870-1880; Mrs. Cady's school, New Haven, Conn., 1880-84; Judson Institute and Bennett Seminary, 1884-1893; instructor, University of Minnesota, 1893 to 1913; retired with rank of assistant professor. Ventura, Calif.

Best, Emir, born at Casselton, N. D.; daughter of Wm. H. and Abbie W. Hall Best; B. S. in home economics, '12; instructor in domestic art, college of agriculture, 1912 to date; has taught in the Northwestern summer school, 1910, 1911, 1912, and in the North Dakota school of forestry, 1912; member Agricultural faculty club, Phi Upsilon Omicron, home economics branch of Woman's league; Congregationalist.

Beta Theta Pi. Beta Pi chapter established in 1889. Founded at Miami University, 1839.

Bethke, William, scholar in economics and political science, 1910-11.

Bib and Tucker. An organization of freshmen young women.

Big Nine. See Intercollegiate Conference Athletic Association.

Billsborrow, J. D., agronomist of the Crookston experiment station, 1911-1912.

Bishop Gilbert Society. See Chi Rho Theta.

Bissell, Frank S., clinical instructor in medicine and radiographer, University hospital, 1912 to date.

Bissell, Lucetta., secretary to the registrar, since August, 1912. B. A., Wisconsin, 1909.

Black, Captain Mahlon. Regent from January 22nd, 1855-February 14th, 1860. See Weekly, Nov. 4, 1901, for extended biography.

Blackstone. A law literary society organized in 1899.

Blair, Mrs. Margaret Josephine, was born at Goodhue Center, Minn., May 5, 1863, of Scotch-Canadian parents—John V. H., and Isabella Kennedy Bailey, farmer-pioneers of Minnesota. The Red Wing high school supplemented the rural school, and later she studied household economics at the Armour Institute and at the Jewish Training school in Chicago, subsequently observing the work on these lines in many leading institutions with a view to a constructive knowledge. Of Mrs. Blair's twenty-three years' experience, eighteen have been spent as director of the domestic art division of the college of agriculture of the University. Mrs. Blair is the author of several books and many published articles on household economics, domestic art and related subjects. In 1896 her first book, "Garment drafting," was published, and in 1898 it appeared with revised text under the title "Margaret Blair's system of model sewing and garment drafting." In 1900 appeared two supplementary volumes entitled "Model sewing" and "Garment drafting." "Sewing basket stories," a book designed for little girls, appeared in 1907, and in 1909 appeared "A new and practical course of graded sewing texts." She has also published numerous articles in magazines and papers on the subject of domestic art.

Blake, Frances, assistant in University practice school, 1911-12.

Blegen, Hallward Martin, clinical assistant in gynecology, 1911 to date.

Bliss, Frank Walker, instructor in chemistry, 1909 to date.

Bliss, Gilbert Ames, instructor in mathematics, 1900-03.

Block, E. Bates., demonstrator of pathology and bacteriology, 1897-98.

Blomquist, O. E., assistant instructor cream and butter work, 1911-12.

Blosmo, Oscar J., assistant in pharmacy, 1907-1912; instructor in dispensing to date.

Boardman, Charles H., professor of medical jurisprudence, 1888-90.

Board of Control, The. The act of 1901, creating the state board of control, was not primarily designed to include the educational institutions of the State. In the fight against the whole proposition, an amendment was proposed to the bill, making it include the educational institutions of the state in its provisions. Greatly to the surprise of those who were opposing the bill, and who hoped thus to defeat it, the bill was passed and became a law. The bill, as it was passed, was believed to be unconstitutional by all friends of the University, since the title was not amended to include the educational institutions. No attempt was made by the board of control to assert its authority over the University. The regents, for two years, continued in undisputed control. The normal schools, in like state with the University, voluntarily waived their technical right under the law and placed themselves under the supervision of the board of control. In a short time, friction arose over the administration of the affairs of those schools, and the normal board attempted to withdraw from the position into which it had voluntarily put itself. The case was taken into the courts, and a ruling was secured which declared the educational institutions of the state "charitable" in their nature and the law was held to be constitutional. Still no attempt was made to bring the University under the supervision of the board of control. The legislature met and an attempt was made to have the University released from such control by a special act specifically declaring such freedom for the University. A combination of interests which desired to use the University to secure their own release from board of control supervision, managed to prevent the passage of this act. When the legislature of 1903 adjourned without affording the desired relief, the board of regents, made overtures to the board of control and the board assumed the partial control given it under the law. This control extended only over the purchase of supplies, the purchase of fuel and placing of insurance, the erection of new buildings. This dual control could result in but one outcome, unsatisfactory conditions all around. After a two years' trial conditions were such as to make further continuation of the arrangement wholly intolerable. The legislature of 1905, by a practically unanimous vote, afforded the long-sought relief and the University again came back under the sole supervision of the board of regents, save in the matter of placing insurance, purchase of fuel and the erection of new buildings; in all these matters the board of control still has control.

For further information on this matter see the Weekly, fall and winter numbers,

of 1904-05, during the session of the legislature.

Board of Regents. The revised statutes of 1894 say—"The government of the University shall be vested in a board of twelve (12) regents, of which the Governor of the State, the State Superintendent of Public Instruction, and the President of the University, shall be members ex-officio, and the nine (9) remaining members thereof shall be appointed by the Governor by and with the advice and consent of the Senate. Whenever a vacancy therein occurs, for any cause, the same shall be filled for the unexpired term in the same manner. After the expiration of the term of the members of the present board of regents, their successors shall be appointed in a like manner and shall hold their office for the full term of six (6) years from the first (1st) Wednesday of March succeeding their appointment, until their successors are appointed and qualified. The president of the University shall be ex-officio the corresponding secretary of the board of regents."

Ex-officio members—George Edgar Vincent, LL. D., Minneapolis, the president of the University; Adolph O. Eberhart, Mankato, the Governor of the State; C. G. Schultz, St. Peter, the State Superintendent of Public Instruction.

Appointive members—John Lind, Minneapolis, 1914, President of the Board; John G. Williams, Duluth, 1914; A. E. Rice, Willmar, 1915; Charles L. Sommers, St. Paul, 1915; B. F. Nelson, Minneapolis, 1916; Pierce Butler, St. Paul, 1916; Fred B. Snyder, Minneapolis, 1916; W. J. Mayo, Rochester, 1919; Milton M. Williams, Little Falls, 1919.

Boar's Head. A men's organization which existed in 1899.

Boncquet, August, assistant in French, 1909-10.

Bond, Charles E., instructor in justice court practice, 1897-98.

Bonner, W. D., born in 1880, assistant professor of physical chemistry in the division of soils since 1913; B. S., Nebraska Wesleyan University, 1906; lecture assistant and laboratory demonstrator, Toronto, 1908; Ph. D., Toronto, '09; lecturer Queen's University, 1909-11; assistant professor, 1911; has had experience in charge of chemical laboratories at Nebraska experiment station summers of 1908 and 1910; has published analytical and physical chemistry.

Booren, Clifton A., assistant in dermatology, 1913-.

Booth, Albert Edwin., born September 30th, 1871, at Paterson, N. J., Tracy high school, freshman and sophomore work at Hamline University; University college of homeopathic medicine and surgery, 1899. Some experience in common schools of State as teacher; dispensary assistant, 1897; lecturer on surgical emergencies, 1899-1903; lecturer on orthopedia, 1903-04; professor of orthopedia, 1904 to 1909. Member of board of directors of the General Alumni Association.

Boss, Andrew., born June 3d, 1867, Wabasha county, Minn. Educated in common schools, school of agriculture; assistant instructor and professor, School and College of Agriculture, Division of Agriculture and Animal Husbandry, 1894-'02; associate professor of agriculture, 1902-05; professor of agriculture and animal husbandry, 1905 to 1913; professor of agronomy and farm management and chief of division to date. Author, Experiment Station Bulletins 31 and 62; United States Department of Agriculture, Farmers Bulletin No. 83; contributor to Bailey's Encyclopedia of Agriculture.

Boss, William., instructor in carpentry and engineering (power machinery), school of agriculture, 1895 to date; instructor in farm structures, also, 1904-1907; professor of farm structures and farm mechanics, 1907 to 1909.

Botanical Plant House. This was built and equipped in 1906 at a cost of $10,000. It consists of five connected glass houses covering a ground area of about 3,700 square feet, and an adjoining work room 17x25 feet, with basement of same size.

The various houses are maintained at different temperatures to meet the needs of the various plants cared for. The Xerophitic house (25x25 feet) provides for the culture of cacti, euphorbias and other succulent and heat loving plants; the palm house (28x33 feet) has a gable height of 18 feet ,and provides for palms, cycads, tree ferns and bamboos; the temperature house provides for the common plants familiar as house plants; the aquatic house (18x33 feet) contains a large cement tank for water lilies, papyrus and other aquatics and a bog for the culture of pitcher plants, Venus fly traps, and sundews; this house contains many portable tanks for the culture of smaller aquatics, and many perching orchids occupy hanging baskets in this house; the lily house (18x33 feet) is devoted largely to lilies, amaryllids and other plants requiring similar cultural conditions. It is expected that in time provision will be made to make the part of the campus about the plant house a botanical garden and that further provision

will be made for a laboratory greenhouse for the use of the department of botany. The legislature of 1913 appropriated $3,000 for an addition to the plant house.

Botanical Seminar. Advanced students in botany and staff of department meet fortnightly to discuss botanical literature and report on research work under way.

Botanical Survey publishes Minnesota Botanical Studies and Minnesota Plant Life. The former is devoted to the results of investigations carried on in the survey and in the department of botany. The latter is a series of popular booklets, treating of the plants of the state. In addition, the survey publishes at intervals semi-popular scientific monographs, such as Minnesota Plant Life, Minnesota Plant Diseases, and Minnesota Freshwater Algae.

Botanical Survey. See Geological and Natural History Survey.

Botany Museum. The general herbarium numbering about 400,000 specimens and comprising the series of plants collected by the state botanist; an alcoholic collection of material for dissection; a collection of woods of Minnesota; a limited series of carboniferous and cretaceous fossil plants, including the Lesquereaux collection from the Minnesota River localities. Two new herbaria are being developed with special reference to museum needs. One is a formation herbarium arranged to show the grouping and importance of the species which form the natural plant societies of the State. The other is designed to show the origin of new forms and species of plants, both in nature and under cultivation. A beginning has also been made in bringing together collections of the Botanical Survey, as well as from other sources, designed to illustrate the uses of plants in everyday life and in the industries.

Bothne, Gisle Christian Johnson, born September 7, 1860, Frederickshald, Norway; son Throndj. Bothne, well known Norwegian scholar and writer; m. Catherine E. Brandt; two daughters; educated in gymnasium of Frederickshald; Luther college, Decorah, Iowa, '78; Northwestern University, Watertown, Wis., '79; also Johns Hopkins; one year in Europe; head professor of Greek and Scandinavian, Luther college, '81 to '07; associate professor of Scandinavian, Minn., May, '07; head of department since that date; author of History of Luther college, '97; and papers on various subjects relating to the language, literature and mythology of the Scandinavian countries; contributor to the Norwegian papers in the United States; "Language of Modern Norway" in publications of the Modern Language association; member Modern Language association of America; Lutheran.

Bouman, Hermann A., clinical instructor in physical diagnosis, 1908-10; clinical assistant in surgery, 1910-11.

Boutell, Fannie C., preceptress of the school of agriculture, 1905 to ——; instructor in domestic economics to date; in charge of section; also instructor in English and social culture.

Bowen, Edgar C., Captain, U. S. A., professor of military science and tactics, 1881-83.

Bowen, Edith, medical library, 1895 to 1910, department of serials, University library, 1910 to date.

Bowen, James., instructor in horticulture and superintendent of the horticultural department. Born in Bodenham, England, October 3, 1843. He was apprenticed at an early age at the New botanical gardens of which his uncle was manager. After serving his apprenticeship he went to Dublin, where he had charge of the government gardens. In 1875 he came to Chicago, and for six years had the management of the Chicago botanical gardens. In 1881 he became connected with the University. Died May 20, 1883.

Bowles, Oliver, born January 10, 1877, at Ontario, Canada; Irish and English ancestry; m. Eva W. Workman; two sons; instructor in geology and mineralogy since 1909; B. A., '07, M. A., '08, University of Toronto; holder of Alex. T. Fulton, Edward Blake and Daniel Wilson scholarships in freshman, sophomore and junior years, senior year "proxime accessit" for governor general's gold medal for general proficiency; first class honors as specialist in geology and mineralogy; fellow in petrography one year, Toronto; instructor in petrography one year, Michigan; field work in geology for bureau of mines of Ontario in iron ranges of Nipigon Region, and gold fields of Sturgeon lake region, Ontario; study of clay and building stones of Minnesota; has published Tables for determination of common rocks; Pyromorphite from British Columbia, Canada; Crystal forms of pyromorphite; member Sigma Xi; Congregationalist.

Boyce, Jessie Wadleigh, born July 8, 1884, at Sioux Falls, S. D.; A. B., '05; instructor and critic, University high school, 1900 to date; taught in the high schools at Sioux Falls, S. D., and Fairmont, Minn., from 1905 to 1909.

Boyd, Willard L., intructor in veterinary medicine and surgery, 1911-13; assistant professor to date.

Boys' Dormitory. This building was erected for the school of agriculture in 1903, at a cost of $40,000.

Brace and Bit. An organization of young women of 1912.

Bracken, Henry Martyn., born February 27th, 1854, at Nobeltown, Pa. Early education in public schools and Eldersridge Academy. Medical departments of the Universities of Michigan, Columbia, and Edinborough. Professor of materia medica and therapeutics from 1888 to 1907. Professor of preventive medicine, 1907-1909. Author of outline of Materia Medica and Pharmacology; Therapeutic Notes; Disinfection and Disinfectants; numerous papers in various publications upon medical and sanitary topics.

Bradley, Charles Herbert, clinical instructor in medicine, 1912-13.

Brady, W. J., demonstrator in charge of the dental infirmary and technical teaching, 1888-1890.

Brady, Edwyn R., clinical assistant in ophthalmology and otology, 1910 to 1913.

Brazie, Henry W., born in Ohio, in 1845. Graduate of Grand River College, '61. Served in the war, and was discharged as captain. Graduate of Cleveland Homeopathic College, 1871. President of the State Lunacy Board, and Chairman of the Board of Health of Minneapolis. One of the founders of the Minnesota homeopathic medical college in 1886. Secretary of the college of homeopathic medicine and surgery, from its establishment, in 1888 to 1892, dean 1892-93. Professor of paedology. Resigned in 1893.

Breda, O. J., professor of Scandinavian, 1884 to 1899. See first edition.

Brekhus, Peter John, clinical assistant in crown and bridge work, 1911-12; instructor same, 1912-13; assistant professor same, 1913-

Bren Affair, The. Early in June, 1911, Mr. Bren, then cashier of the University, reported that he had been held up and robbed, of something over $13,000.00 on the University campus. Mr. Bren was later accused of having embezzled this amount and was arrested and indicted. After a year and a half had passed the regents made formal demand that Mr. Bren forthwith return all funds belonging to the University for which he was responsible. The attorneys for Mr. Bren then paid over to the University the exact amount which the public examiner had found missing.

Mr. Bren was brought to trial on an indictment charging him with not accounting for public funds in his charge, and was acquitted. The county attorney refused to nolle the remaining cases and asked for more time to prepare the same. The court held that the state had had sufficient time to prepare its cases and ordered the indictments dismissed and freed Mr. Bren. The University recovered every cent that was missing and suffered no loss.

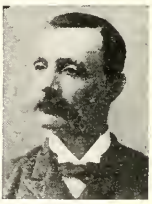
Bren, Joseph D., born January 27th, 1874, at Hopkins, Minn. Early education in public schools of Hopkins; Minneapolis Central high school; three years at the University. General business experience. Clerk, 1900-04; cashier, 1904-1911.

Brenton, B. F. P., instructor in chemistry, 1909 to date.

Brewer, Flora E., instructor in Latin, 1897-98.

Brewer, William H., professor of agriculture in Yale; lecturer on stock breeding, 1882-83.

Brewster, Florence., librarian of the school of agriculture, 1892-1900.



Brewster, Henry Webb., instructor in mathematics, school of agriculture, 1890-92; assistant principal and assistant professor of mathematics, 1892-93; in charge of the school, 1893-94; principal of school of agriculture and professor of mathematics, 1894-1900.

Brierley, Wilfrid Gordon, born September 9, 1885, at Dover, N. H.; son of Benjamin and Harriet Brierley, who were both born in England and who came to New Hampshire in 1875; assistant professor of horticulture and head of the section of fruit and vegetable culture and handling, 1913; B. S. A., Cornell, '06; M. S. in horticulture, Washington State College, '13; two years experience as horticulturist of the National Farm School at Doylestown, Pa.; five years instructor in horticulture at the Washington State College, Pullman, Wash., and four years in farmers' institute work in connection with the Washington State College; research work in fruit and vegetable harvesting, packing, marketing and storage; the results of research work are about to be published; member American Breeders' Association, Society for Horticultural science, Alpha Zeta.

Briggs Medal, The. See Briggs prize in foundry practice.

Briggs Prize in Foundry Practice. For the encouragement of studies in foundry practice, Mr. O. P. Briggs, Commissioner of the National Foundrymen's Association, Detroit, Mich., offers $75 annually, in two prizes, which are to be accompanied by gold medals. The competition is open to sophomores in the college of engineering, and the prize awarded for the best essay relative to the subject. No prize will be awarded if less than five essays are submitted in competition. Essays contain about 3,000 words, and must be submitted to the professor of rhetoric on or before May 1st of each year. Awarded to C. F. Bohm, 1st, and H. V. Fuller, 2nd, in 1902;

to R. A. Lundquist, 1st, and Robert Morris, 2nd; 1903; H. C. Estep, 1st, and S. G. Harwood, 2nd, with honorable mention for T. C. Morris.

The offer of prizes still stands open and prizes will be awarded whenever papers of sufficient merit are presented.

Briggs, Warren S., professor (homeopathic) of clinical surgery, 1888 to 1909.

Brimhall, John B., born July 4, 1862, in St. Paul; New England ancestry; m. Nellie Mabon, deceased, later Laura Matthews; three daughters by first marriage; clinical instructor in orthopedics, 1912 to date; M. D., '90, Pennsylvania.

Brimhall, S. D., lecturer on veterinary surgery and materia medica, 1890-92.

Brinton, Paul H., instructor in chemistry, 1909-12.

Bristol, Leverett Dale., clinical assistant in medicine, 1910 to 1913.

Britzius, H. A., instructor in technique, 1909-10.

Brooke, William Ellsworth, born October 7th, 1870, at Minier, Ill. B. C. E. University of Nebraska, 1892; M. A., '96; graduate work at the University of Chicago. Taught in the University of Nebraska for three years; Omaha high school four years; instructor in mathematics, University, 1901-05; assistant professor, 1905 to 1911; professor of mathematics and mechanics and head of the department to date. Member of the American Mathematical Society; member of Circolo Mathematico di Palermo; member of the Society for the Promotion of Engineering Education; Sigma Xi; Sigma Zeta. Author of Plane and Spherical Trigonometry (with G. N. Bauer).

Brooks, Elizabeth Florence, assistant in domestic art, 1912-13.

Brooks, Jabez, born September 18th, 1823, England. Elementary education in English schools; Rock River Seminary, Mount Morris, Ill.; Wesleyan University, Middleton, Conn.; B. A., 1850; M. A., 1853; D. D., 1864. Teacher private, district and classical schools, preparatory school and college; University of Minnesota, 1869 to 1909; professor emeritus to date of death, January 26, 1910. See Alumni Weekly of January 31, and February 7, 1910. Member of Normal School board; Agricultural College board; president Minnesota Educational Association; president of Hamline University, 8 years. Author of Introduction to Attic Greek.

Brooks, L. May., assistant in library, 1898-1910.

Brown, C. E., instructor in Crookston school of agriculture, 1907 to date.

Brown, Doris Lilian, scholar in mathematics, 1911-12.

Brown, Edna Jeraldine (Mrs. S. W. Batson), general secretary of the Y. W. C. A., 1905-06.

Brown, Edgar Dewight, born April 4, 1869, at Albion, N. Y.; assistant professor of mat. med., 1907-09; professor of same, 1909-13; associate professor of pharmacology, 1913—; Ph. G., New York college of pharmacy, '98; Phar. D., '99; M. D., Western Reserve, '02; demonstrator pharmacol. and mat. med., same, 1903-06; instructor pharmacol., 1906-07; member M. A. A., Physiol. soc., Soc. Pharmacol., Am. Med. Association, Pharmacology.

Brown, Faith S., preceptress and instructor in English, Crookston school of agriculture, 1912 to date.

Brown, Frederick V., lecturer on chattel mortgages, 1897-1900.

Brown, Horace H., instructor in chemistry, 1912 to date.

Brown, John C., born August 30, 1876, Carthage, Mo. Educated in Carthage high school; University of Minnesota; Stanford University, 1899. Teacher, high school, Fullerton, Cal.; San Diego, Cal., normal school; demonstrator in zoology, Hopkins Seaside Station, 1898-1899. Instructor in zoology and comparative anatomy, University, 1900-07; assistant professor of animal biology, 1907 to 1912; clinical assistant in medicine to 1913.

Brown, Paul Francis, clinical assistant in surgery, 1912-13; assistant in surgery, 1913—.

Brown, Ray E., auditor, office of the comptroller, 1911 to date.

Brown, Rome G., born June 15, 1862. A. B., Harvard, magnum cum laude. Admitted to bar, Vermont, 1887. Practicing lawyer. Special lecturer on water rights, college of law, 1907 to date.

Brude, Julia, instructor in sweet curd cheese work, 1903-05.

Bruhn, Louise Hedwig, scholar in German, 1911-12.

Brush and Pencil—An organization of students specially interested in art who can demonstrate some ability in that line. Organized in 1909.

Bryant, Charles S., St. Peter. Regent, 1870-1875.

Bryant, Oliver R., clinical assistant in medicine, 1911-13.

Brynildsen, Ina, .born at Graceville, Minn.; graduated from the Minneapolis school of music, oratory and dramatic art, 1910; has studied under graduates of Oberlin, Boston, conservatory, Leipsig conservatory and pupil of Teichmueller, Liepsig; six years experience teaching piano. Instructor in music the Morris school of agriculture, since 1912.

Buck, Argyle, was born July 23rd, 1848, at Argyle, N. Y., and was given the name of the town by his parents. His father was a Highland Scotchman and his mother, Delia Ann Lewis, a Vermont Yankee. Mr. Buck enlisted in August, 1862, and served for three years in the war as a member of the 110th N. Y. regiment; three brothers were with him as members of Company F of that regiment. After he was mustered out of service, Mr. Buck went to Nebraska and spent three years hunting and trapping beaver, wolf and otter and made enough money so that he was able to return home and pay off a $1,600 mortgage on his father's farm. Thirty years ago, just after he had married Catharine Howles, Mr. Buck came to Minneapolis and followed his trade of painter for ten years and then came to the University as janitor and was later transferred to the military department to look after the stores and equipment of that department in which he was a fixture for his quaint philosophy of life is refreshing because of its originality and its optimism. He has had rather more than his share of the troubles of this world but he is still cheerful and his ready wit enlivens his talk upon any topic in which he is engaged. His own estimate of his life is—"I ain't done nothin' to brag about, but I've tried to give everybody a square deal." "Buck" is a great favorite with the boys and they feel for him a genuine regard entirely apart from their interest in him as an unusually interesting character.

Buckman, Thomas S., Faribault. Regent, 1876-1887.

Budget. See page 32.

Buell, Harriet, scholar in art, 1910-11.

Bugle Corps. A branch of the military organization.

Buhr, O., instructor in Crookston school of agriculture, 1911 to date.

Buildings on Main Campus.

*Old Main Bldg. 1857-8 and	1875	$113,573.33
*Agricultural College Bldg.	1875	12,500.00
*The Coliseum	1884	35,000.00
Mechanic Arts Building	1886	40,085.97
Students' Christian Assn. Bldg.	1888	12,000.00
Pillsbury Hall	1889	128,735.00
Law Building	1889	56,546.89
Boiler House	1890	18,295.31
Chemical Laboratory	1891	81,481.52
Remodeled—Men's Bldg.	1914	17,500.00
Millard Hall	1893	60,737.46
Remodeled—Pharmacy Bldg.	1913	98,000.00
Med. Laboratory—Chemistry	1893	14,127.65
Library Building	1895	164,230.07
Ore Testing Works	1895	7,176.69
Laboratory of Med. Science	1896	33,450.95
Remodeled—Dentistry Building	1912	25,000.00
Armory	1896	77,983.67
The Astronomical Observatory	1896	2,266.24
Engineering Shops	1900	33,000.00
Electrical Building	1900	20,000.00
*Anatomy Building	1900	15,000.00
Remodeled—Pharmacy Plant House	1913	7,500.00
Physics Building	1901	66,000.00
Barn	1901	1,000.00
School of Mines Bldg.	1903	57,675.51
Remodeled—College of Education	1914	54,000.00
Inst. of Public Health & Pathology	1906	100,000.00
Alice Shevlin Hall	1906	60,000.00
Botanical Plant House	1906-1914	13,000.00
Folwell Hall	1907	376,500.00
Heating Plant	1909-1911	150,000.00
Anatomy Building	1909-1911	243,342.00
Millard Hall (New)	1909-1911	266,400.00
Elliot Hospital	1909-1911	158,000.00
Sanford Hall—Woman's Dormitory	1909-1911	100,000.00
Main Engineering Bldg.	1912	225,000.00
Experimental Laboratory Building	1911	100,000.00
*Destroyed by fire.		
Chemistry Laboratory	1914	365,000.00
Animal Biology Bldg.	1914	200,000.00
Hospital Service Bldg.	1914	50,000.00
Woman's Gymnasium	1914	125,000.00

Buildings at the Department of Agriculture, St. Anthony Park, Minn.

Farm House	1884	$ 25,000.00
Main Barn	1884	15,000.00
Home Building	1887	18,000.00
*Station Building	1888	15,00.00
Pendergast Hall	1889	25,00.00
Economics Building	1891	6,500.00
Dairy Hall	1891, 1896	42,000.00
Drill Hall	1893, 1913	40,000.00
Dining Hall	1895	78,000.00
Power House	1897, 1900, 1913	87,000.00
Girls' Dormitory, old	1897	49,000.00
Horticultural Building	1899	35,000.00
Meat House	1901	7,500.00
Veterinary Building	1902	25,000.00
Chemistry Building	1902	30,000.00
Boys' Dormitory	1902	40,000.00
Live Stock Pavilion	1904	32,000.00
Farm Machinery Bldg.	1904	5,000.00
Administration Bldg	1907	250,000.00
Dairy Barn	1907, 1913	28,000.00
Girls' Dormitory	1909	50,000.00
Mechanical Bldg & Shops.	1913	260,000.00
Home Economics Bldg.	1914	75,000.00
Gymnasium & Drill Hall.	1914	90,000.00

This department has also the following group of lesser buildings: Plant house, 1888, $4,000; Blacksmith shop, now used for storage, 1895, $5,000; Sheep barn, 1895, $2,700; Insectary, green house and demonstration building, 1906, $2,500; water tank, 1906, $5,000; root cellar, 1906, $500; repair shop, 1907, $4,000; Hog cholera building, 1908, $3,000; coal bunkers, 1909, $6,000; alcohol plant, 1909, $6,000, now used for hog cholera and poultry; Horse barn, 1911, $5,000; Hog house, 1912, $3,000; in addition a few other minor sheds and buildings.

North West (Crookston) School of Agriculture Buildings.

Home economics building.	1905	$15,000.00
Stephens Hall, boy's dormitory	1907	50,000.00
Sidney M. Owens Hall, mechanical building	1907	15,000.00
David L. Kiehle (administration) building	1909	50,000.00
William Robertson Hall, girls' dormitory	1909	25,000.00
James J. Hill (agricultural) building	1912	40,000.00
Farm house	1895, 1911	4,500.00
Supt's house	1901, 1911	3,900.00
Four cottages, station men	1911	10,000.00
Two station barns	1901, 1911	10,500.00

The station has invested in minor barns and nine other buildings, wells, tracks, pumps, etc., $24,400.00.

See also under Cloquet Forestry Experiment Station; West Central (Morris) School of Agriculture; North Central (Grand Rapids) Experiment Station; Northeast Demonstration and Experimental Farm; Southeast (Waseca) Demonstration Farm.

Bull, Alvah, M., instructor in drawing and farm buildings, 1907 to 1912; assistant professor of farm structures, engineer in charge of farm buildings, to date.

Bull, Coates Preston, born October 11, 1872, Edina Mills, Minn.; English and Irish ancestry; m. Lotta Mae Tryon; two sons; school of agriculture; B. Ag., '01; assistant in agronomy Illinois college and station, '01; University assistant in agriculture, 1902; assistant professor of agriculture and assistant agriculturist, experiment station, 1907 to 1911; associate professor to date; research work in plant breeding and other agronomic problems; author of station bulletins 107 and 115, various extension bulletins, press bulletins, U. S. Government bulletin on Barley, various miscellaneous articles, article on "flax" in the Am. Cyc. of Agr., bulletin on corn breeding; member American breeders association, American society of agronomy, A. A. A. S., field crop breeders association of which he is secretary, president of the alumni association of the school of agriculture, president of University farm school club, member Sigma Xi, Alpha Zeta, Mason.

Bull, Mary, instructor in domestic science, 1907 to 1912.

Bunn, Charles W., lecturer on suretyship, mortgages, and practice in the United States Courts, 1888-1895; special lecturer on Federal jurisdiction, 1909 to date.

Burch, Edward P., born August 20, 1870, Menomonie, Wis.; Scotch ancestry; m. Harriet Jackson; one daughter; E. E., '92; assistant in physics, 1890-91; lecturer in railway engineering since 1909; professorial lecturer on same since 1903; consulting engineer; research work in electric railways in America and in Europe, tests of steam locomotives for two railroads; has published, Electric traction for railway trains, 1911; contributor to railway journals; member, Civic and commerce association, alumni committee on high dam, Commercial club, Engineers' club, American institute of electrical engineers, New York railroad club; Presbyterian.

Burch, Frank E., born March 27, 1876, Menomonie, Wis., m. Katharine Jackson; one son and one daughter; clinical assistant in diseases of eye and ear; clinical instructor, same, to 1910; assistant professor of opthalmology and otology to 1913; same, eye, ear, nose and throat, 1913-. M. D., '97; member, Ramsey county, Minnesota state, and American medical asociations, Minnesota academy of medicine, Minnesota and American academies ophthalmology and otolaryngology.

Burgan, J. H., assistant in dermatology, 1899-00.

Burger, C. C., assistant in chemistry, experiment station, 1890-91.

Burgess, Amelia I., instructor in freehand drawing, 1891-1901. Now Mrs. Leo M. Crafts, of this city.

Burgess, Florence E., registrar's office, assistant, 1906-1909; B. A., University, 1906. Now Mrs. W. S. Blackburn.

Burkhard, Arthur Christian, assistant in German, 1911-12.

Burkhard, Oscar C., instructor in German, 1902-1906; leave of absence, studying in Europe, 1906-08; assistant professor of German, 1908 to date.

Burns, Herbert A., clinical assistant in obstetrics, 1911-12.

Burt, David, St. Paul. Regent, ex-officio, 1875-1881, superintendent of public instruction.

Burton, Frank, demonstrator of anatomy, 1891-92.

Burton, Richard, born March 14, 1859, at Hartford, Conn. A. B. Trinity; Ph. D. Johns Hopkins. Taught Old English at Johns Hopkins; Professorial lecturer, University of Chicago; chair of English, University, 1898-1902; Professor of English 1906 to date; managing editor of the N. Y. Churchman; literary editor of the Hartford Courant; associate editor of Warner's Library of the World's Best Literature. Has published seven volumes of verse and seven

of prose, the latest, 1913, "The New American Drama," and "A Midsummer Memory, and other Poems." Member of the Boston Authors' Club; New York Authors' Club; The Players, N. Y., Charter member of Poetry Society of America, member National Institute of Arts and Letters, vice-president, Drama League of America; Delta Kappa Epsilon.

Bush, Ethel Estelle, born at Dover, Minn., in 1882. Dover grades and high school; Winona normal school; partial course at University; assistant instructor in English, school of agriculture, 1906-1913. 1119 Sixth street southeast.

Bussey, William Henry—Born October 24th, 1879, Chicago. Finished the Chicago public schools in '96; A. B., Northwestern University, '00; M. A., Harvard, '02; Ph. D.. Chicago, '04; Taught in the University of Chicago summer schools of 1903, '04; in academy of Northwestern University, '04-'05; Barnard College, Columbia University, '05-'07. Assistant professor of mathematics, 1907 to date. Author of Generational relations for the abstract group simply isomorphic with the group; Finite projective geometries; Galois field tables; Tactical problems of Steiner; Fellow in mathematics, University of Chicago, 1902-04. Member Amer. Math. Soc., Fellow A. A. A. S., Associate editor American Mathematical Monthly.

Butler, John, clinical assistant in dermatology, 1911-12; clinical instructor in dermatology to 1913; instructor in dermatology, 1913-.

Butler, Pierce, St. Paul. Appointed regent June 15th, 1907; reappointed, 1910; Term expires March, 1916. Born in Dakota county, Minn., March 17th, 1866; graduated from Carleton College, 1887; studied law in St. Paul, assistant county attorney, Ramsey county, '91-'93; county attorney, '93-'97; general practice, '97-'99; firm of How & Butler; general attorney for C. M. & St. P. Ry., '00-'05; member of firm of How, Butler & Mitchell; member of the board of directors of St. Paul public library; president of the Ramsey county bar association.

Butner, Anna M., instructor in physical culture for women, 1900 to 1912.

Butterfield, Professor., conducted a private school in the old main building during the winter of 1859-60. He was allowed free rent and was simply to leave the building in as good condition as he found it.

Butters, Frederic King, born February 8, 1878, Minneapolis; American ancestry; B. S. '99; A. B., '00, Harvard; instructor in botany and practical pharmacognosy, 1901 to 1908; instructor in botany to 1910; assistant professor of botany since 1910; research, plant embryology, problems in ecology and plant geography; publications, Observations on Rhodymenia, Observations on Trichogloca, Pacific species of Liagora and Galaxaura, The conifers of Vancouver Island, The seeds and seedlings of Caulophyllum thalictroides, etc.; fellow A. A. A. S., associate member American botanical society, fellow royal geographical society, member Minnesota academy of science.

BUDGET SUMMARY OF PAY ROLL AND SUPPLIES

1913-14

	TOTALS		SUPPORT		SPECIALS	
UNIVERSITY	Salaries	Supplies	Salaries	Supplies	Salaries	Supplies
I. General University—						
Pres. Office	$12,280	$1,000	$12,280	$1,000		
Dean of Women	2,800	250	2,800	250		
Military Dept	3,640	2,100	3,640	2,100		
Registrar's Off.	10,198	2,780	9,898	2,780	$300	
Gen. Exp. & Supp.		22,250		22,250		
Comptroller's Off.	25,980	1,700	25,980	1,700		
Post Office & Inv.	2,880	535	2,880	535		
Miscellaneous	4,460	23,600	1,000		3,460	$23,600
General Storehouse	1,680	100	780		900	100
II. Library	21,965	33,864	17,129	600	4,836	33,364
III. Bldgs. & Grounds	70,186	103,776	58,406	21,955	11,780	81,820
Total Gen. "U"	$156,069	$191,854	$134,793	$53,070	$21,276	$138,784
IV. College of S. L. & A.						
Administration	$5,840	$1,880	$5,840	$115		$1,765
Animal Biology	16,640	3,455	16,640	705		2,750
Astronomy	4,950	168	4,950	18		150
Art Department	1,250	25	1,250	25		
Botany	17,090	2,164	17,090	1,664		500
Comp. Philology	3,350	10	3,350	10		
Economics	17,800	178	17,800	178		
English	12,850	77	9,350	77	$3,500	
Geology	15,170	7,100	13,670	1,318	1,500	5,782
German	17,000	100	17,000	100		
Greek	5,300	65	5,300	65		
History	16,650	50	16,650	50		
Latin	7,400	25	7,400	25		
Mathematics	12,450	15	9,950	15	2,500	
Music	4,200	1,220	3,700	20	500	1,200
Philosophy	2,100	255	2,100	80		175
Physical Training Men	4,870	665	4,870	665		
Physical Training Women	3,955	310	3,955	310		
Physics	15,330	8,187	11,830	687	3,500	7,500
Political Science	7,850	50	7,850	50		
Rhetoric	25,190	432	24,590	432	600	
Romance Languages	13,800	25	13,800	25		
Scandinavian	4,600	93	4,600	23		70
Sociol. & Anthrop.	6,725	275	6,725	275		
Stud. Work Com.	2,100	40	2,100	40		
Total S. L. & A.	$254,460	$26,764	$242,360	$6,872	$12,100	$19,892
V. College of Engineering						
Administration	$6,380	$1,433	$6,380	$825		$608
General	6,980	900	6,980	900		
Architecture	5,550	1,200	5,550	1,200		
Civil Dept.	11,450	950	11,450	950		
Mech. Dept.	14,980	11,980	11,480	1,980	$3,500	10,000
Elec. Dept.	11,450	20,500	7,950	500	3,500	20,000
Draw. & Desc. Geom.	7,300	180	4,800	180	2,500	
Exp. Dept.	8,300	7,700	8,300	700		7,000
Math. and Mech.	10,750	100	10,750	100		
Total Coll. of Eng.	$82,140	$44,943	$72,640	$7,335	$9,500	$37,608
VI. The Medical School						
Administration	$7,380	$500	$7,380	$500		
Anatomy Dept.	27,160	2,945	27,160	2,945		
Dept. of Physiol.	18,600	1,110	18,600	1,110		
Dept. of Pharm.	7,720	400	7,720	400		
Dept. of Path. Bact. and Public Health	21,460	3,325	21,060	3,325	$400	
Dept. of Surgery	14,620	1,000	14,620	1,000		
Dept. of Medicine	11,960	1,000	11,960	1,000		
Dept. of Obstetrics	6,250	300	6,250	300		
Elliott Hospital	40,410	39,190			$40,410	$39,190
Total Med. School	$155,560	$49,770	$114,760	$10,580	$40,810	$39,190
VII. School of Chem.	$36,230	$11,750	$36,230	$11,050		$700
VIII. Sch. of Mines	35,820	14,220	18,540	6,000	17,280	8,220
IX. College of Dent.	49,100	20,070	49,100	16,970		3,100
X. The Law School	34,500	6,500	34,600	1,500		6,000
XI. Coll. of Pharm.	15,020	1,530	15,020	1,530		
XII. Coll. of Educ.	17,510	1,550	16,910	1,550	600	
XIII. Extension Div.	30,900	9,100			30,900	9,100
XIV. Graduate Sch.	12,860	4,215	3,160	200	9,700	4,015
Total	$231,940	$68,935	$173,460	$38,800	$58,480	$30,135
Total University	$680,169	$362,266	$738,003	$116,657	$142,166	$265,609
Dept. of Agriculture						
I. Administration	$8,500	$1,050	$6,500	$1,050	$3,000	
II. Business Office	6,040	4,985	5,420	4,985	620	
III. Miscellaneous		3,853		3,853		
IV. Book Store	1,600	9,880			1,600	9,880
V. Registrar's Office	3,300	300	3,300	300		
VI. Library	5,435	5,265	1,700		3,735	5,266
VII. Agr. Economics	4,480	2,000	2,480	1,000	2,000	1,000
VIII. Agr. Education	9,780	600	8,680	500	1,100	
IX. Gen. School and Dining Hall	15,030	44,658	8,190	1,128	6,840	43,530
X. Agron. and Farm Management	36,835	6,604	17,680	4,229	19,155	2,375
XI. Agr. Engineering	35,378	13,061	16,158	4,381	19,220	8,680
XII. Bldgs. & Grounds	11,555	2,115	10,055	2,115	1,500	
XIII. Agr. Extension	29,180	26,050			29,180	28,050
XIV. Pub. & Mailing	2,960	3,600	910	1,675	3,050	1,925
XV. Summer School	3,905	753	2,185	753	1,720	
XVI. Bot. & Pl. Path.	15,330	6,663	6,520	1,123	8,810	6,540
XVII. Agr. Chemistry	11,150	2,947	4,950	1,632	6,200	1,315
XVIII. Soils	11,580	2,580	7,360	1,600	4,220	980
XIX. Da. and An. Husb.	41,990	27,084	19,800	20,274	22,190	6,910
XX. English	5,950	150	4,250	150	1,700	
XXI. Entomology	9,900	5,200	2,500	600	7,400	4,600
XXII. Forestry	16,650	2,450	3,600		13,050	2,450
XXIII. Dom. Science	24,280	2,772	23,130	2,772	1,150	
XXIV. Horticulture	18,950	6,403	7,520	783	11,430	5,620
XXV. Veterinary	13,390	15,503	6,830	983	7,560	14,520
Total Dept. of Agriculture	$344,046	$198,426	$167,718	$55,886	$176,330	$142,540
Total University	1,224,217	560,692	905,721	172,543	318,496	408,149
XXVI. Cr. Sub-Sta.	$33,430	$24,470	$33,430	$6,470		$18,000
XXVII. Mor. Sub-Sta.	24,225	18,250	21,900	3,100	$2,325	15,150
XXVIII. G. R. Sub-Sta.	4,800	2,200	4,800	2,200		
XXIX. Dul. Sub-Sta.	5,560	6,540	5,560	540		6,000
XXX. Waseca Sub-St.	3,500	400	3,500	400		
Total Sub-Stations	$71,515	$50,860	$69,190	$12,710	$2,325	$38,150
Grand Total	$1,295,732	$631,552	$974,911	$185,253	$320,821	$446,299

Total Salaries and Supplies	$1,927,284
New Special Appropriations "U"	502,000
Unexpended Balance Brought Forward "U"	663,055
New Special Appropriations Agric.	223,600
Unexpended Balance Brought forward from last year's Bud. Agri.	110,651
New Special Appropriations Crookston	108,700
Balance Brought Forward Crookston	709
Balance Brought Forward Morris	218
Balance Brought Forward Grand Rapids	458
New Special Appropriations Waseca	16,000
Uninvested Trust Funds	4,968
Grand Total	$3,657,643

INCOME AND EXPENSES FOR THE BIENNIUM 1910-11 and 1911-12

In considering the figures which follow, a very brief summary of the latest report of the Board of Regents, just published, the alumni should keep in mind that the report covers the last half of the legislative biennium of 1909-10 and 1910-11 and the first half of the following legislative biennium of 1911-12 and 1912-13. The following diagram illustrates the facts.

Legislative biennium 1909-10 and 1910-11 | Legislative biennium 1911-12 and 1912-13

University biennium.

Funds available:		
Deficiency appropriation	$ 130,000.00	
" Hospital	33,700.00	
Standing appropriations		
23/100 mill tax	285,284.49	$ 285,792.71
School of mines	9,500.00	9,500.00
Fruit farm	2,000.00	2,000.00
Annual appropriations		
General support	200,000.00	325,000.00
Special support	190,200.00	379,850.00
Interest income--land grant	58,865.55	57,328.44
Swamp lands fund	8,047.55	10,968.72
Federal government	79,997.99	75,000.00
Fees, sales, etc.		
Tuition	157,449.44	173,878.48
Farm sales	29,485.48	69,776.74
Rents, campus, houses		14,622.61
Miscellaneous	33,522.60	32,255.23
Contingent fund re-credited	300.00	
Advance on 23/100 mill tax	100,000.00	
	$1,318,353.10	$1,435,972.93
Balance at beginning of year 1910-11	$ 91,724.10	
Income for year 1910-11	1,318,353.10	
Income for year 1911-12	1,435,972.93	
Total available	$2,846,050.13	$2,846,050.13
Expenditures for year 1910-11	$1,254,859.83	
1911-12	* 1,354,886.73	
Total expenses of biennium	$2,609,746.56	$2,609,746.56
Balance		$ 236,303.57

The balance shown is in no sense a real balance--It includes $100,000.00 advanced on the 23/100 mill tax; also, $47,300.77 of the Federal funds, which properly belong to the following year; also $61,728.90 in outstanding contracts and orders. The real balance to be carried over into the next biennium is only $5,476.03. The difference between the total of the items given above and the balance shown is accounted for by bills approved but not paid until after the opening of the following biennial period.

* This item is made up as follows:-

General University, administration, business management, care of buildings, repairs, heat and light	255,828.21
College of science, literature and the arts	249,972.38
College of engineering and the mechanic arts	71,527.26
Agricultural department, complete	433,430.22
The law school	32,212.97
The college of medicine and surgery	98,995.92
Hospital	66,089.07
The college of dentistry	39,281.29
The college of pharmacy	11,801.11
The school of mines	34,510.81
The school of chemistry	40,735.50
The college of education	17,781.46
The graduate school	2,720.53
Total maintenance for year 1911-12	$1,354,886.73

BUILDINGS AND EQUIPMENT FOR THE BIENNIUM 1910-11 and 1911-12

Amount available:

Balance on hand 8/1/10	$ 752,447.74	
Receipts for year 1910-11	877,791.82	
Receipts for year 1911-12	890,065.74	
Total funds available	$2,520,305.30	$2,520,305.30

Expenditures:

For year 1910-11		
Heating plant	$ 23,854.29	
Elliot hospital	109,521.78	
New engineering buildings	70,708.77	
Sanford hall	48,348.70	
New Millard hall	12,787.42	
Woman's dormitory, agriculture	43,780.77	
Other lesser items	134,218.88	
Total for year 1910-11	$ 443,220.61	= 443,220.61
For the year 1911-12		
Heating plant	$ 31,710.21	
Tunnel construction	15,477.25	
Anatomy building	187,609.37	
Elliot hospital	33,095.88	
New Millard Hall	192,029.07	
Engineering buildings	189,477.77	
Woman's dormitory, agriculture	47.400.05	
Mechanical Bldg., agriculture	36,632.59	
Dairy Pavillion	10,757.11	
Elliot hospital equipment	26,523.47	
Engineering buildings equipment	13,360.85	
Engineering laboratory equipment	18,821.58	
Live stock, equipment	8,607.94	
New cottages	10,000.00	
Industrial building	10,156.31	
Silo, Grand Rapids	4,000.00	
Girls' dormitory, Morris	36,674.40	
Heating plant, Morris	34,083.15	
Other buildings and equipment, in sums less than $5,000 each	95,105.25	
Total for year 1911-12	$1,001,522.25	=1,001,522.25
Total for biennium		$1,444,742.86 = $1,444,742.86
Balance forward		$1,075,562.44

This balance is available as follows:-

Heating plant	$ 127,212.23	
Chemistry building	169,750.37	
Dental building, changes	24,992.00	
Ins. and fire proof. Millard Hall	121,898.20	
Anatomy building	46,969.26	
Elliot Hospital	515.58	
New Millard Hall	61,583.51	
Elliot hospital site	5,366.22	
Engineering buildings	9,300.88	
Sanford hall	617.30	
Equipment	188,582.97	
Mechanical building--agriculture	221,330.73	
Other buildings, agriculture	66,090.99	
Other lesser items	31,352.20	
Total balance 8/1/12	$1,075,562.44	= $1,075,562.44

Practically all of this, except the item for Chemistry building, has since been paid out on contracts in process of completion at the end of the fiscal year.

In the foregoing statement we have eliminated receipts from campus extension tax and appropriation for homeopathic building and all items not properly an expense for the period covered.

Butts, Edmund L., born at Stillwater, Minn., August 15, 1868; son of Edmund Gregory and Mary White Butts; m. Lilian Stafford Hatie; professor of military science and tactics, 1909-12; attended the University two years; graduated from West Point in 1890; was in the Indian campaign of 1890-91; the Spanish-American War and Philippine insurrection with engagements at Maasin, Layog, Tubungan, Lambunao, Dingle, in the Island of Panay, P. I., 1900, and skirmishes at other places in the island; author of a Manual of physical drill. '97.

Bye, O. O., born in Norway; attended the higher common schools in Norway and the school of non-commissioned officers in the Army for three years; thirty years experience in cabinet making and house building; superintendent of buildings and instructor in carpentry and farm structures at Morris School of Agriculture since 1911.

Cadet Band was established in 1900. It has a standard membership of 60, and any registered student may become a member by passing the examination required. Its purpose is to add to the efficiency of the cadet corps and to assist in all student activities where it may be desirable, and to provide an opportunity for those so inclined to receive training under an efficient leader. Students who are required to pursue work in drill may get credit for the same by playing in the band for the required length of time. B. A. Rose has been band master from the beginning of the organization.

Cady, LeRoy, was born January 9th, 1879, at Buffalo, Minn.; American; m. Fannie M. Davies; school of agriculture, 1900; B. Ag., 1907; taught in the department since 1903; instructor 1906 to 1910; assistant professor to 1911; associate professor since 1911; acting chief of division; assistant horticulturist of experiment station since 1907; research work in horticulture and author of extension bulletins 16, 17, bulletin 36 of the department of public instruction and frequent contributor to periodical press and revised popular fruit growing; member state horticultural society, state florists' association, A. B. A., Alpha Zeta fraternity; Congregationalist.

Cahill, Thomas., instructor in rhetoric, 1905-1910.

Caine, W. A., lecturer (homeopathic) medicine and surgery, 1901-02.

Caldwell, Mabel, stenographer, business office, 1904 to 1906.

Calhoun, Frederick D., instructor in rhetoric, 1905-07. Graduate of the University, class of 1907.

Camp, Walter E., assistant demonstrator in anatomy, 1912-13.

Campbell, Gabriel, professor of moral and intellectual philosophy and instructor in German from 1869 to 1880. Member of the first University faculty.

Campbell, Robert Allen, born December 27th, 1868, at Detroit, Mich. Graduated high school, Alexandria, Minn., 1887; academic student one year; College medicine and surgery, 1896; assistant in diseases of nose and throat, 1897 to 1904; clinical instructor, 1904 to 1910. Four years' experience in civil engineering work. Author of various magazine articles upon diseases of the nose and throat.

Campus. The University campus includes 108.5 acres of land within the city limits of Minneapolis. The first purchase of land for the present site was made by the University, October 21st, 1854, twenty-five and one-third acres being purchased at that time of Paul R. George and Joshua Taylor. A mistake was made in making out this deed and to correct the same a new quit-claim deed was made by Calvin Tuttle, who quit-claimed the land intended to be conveyed in the previous deed, on July 21st, 1856. The quit-claim deed covered twenty-seven and eight-one-hundredths acres. This piece of land was bounded on the south by the section line running eighty-nine rods from the east bank of the Mississippi river, thence 39 3-4 degrees west to a point approximately at the corner of the present intersection of 14th and University avenues southeast, thence back to the river on a line conforming very closely with the present railroad tracks. The consideration paid by the regents was $6,000, $1,000 in cash advanced by friends and $5,000 in notes secured by mortgage, bearing 12 per cent interest. So rapidly did the land increase in value, that the legislature, which met the same year of the purchase, authorized the regents to borrow $15,000 secured on the land purchased for $6,000.

No additions were made to the campus until the legislature of 1877 appropriated $18,000 to enlarge the campus. At that time, Thatcher's addition was purchased and a part of the land which now lies north of the Great Northern tracks. Two years later the legislature made another appropriation for increasing the campus, $20,000 being given for the purpose, and following year, 1880, $20,000 more was appropriated for the same purpose.

The sale of a right of way through the campus added $28,000 to the amount available for the purchase of additional land.

With this money the purchase of the land to the north of the Great Northern tracks, (save a little strip, on Eleventh avenue, 26 1-2 by 181 feet, which was afterward contributed by Mr. S. H. Chute), and four and one-half blocks bordering the

Plan for Campus Development

south side of the campus, extending to Arlington street. In 1903, the legislature appropriated $11,000 for the purchase of more land and for grading the campus. With this money was purchased four lots in block 3, part of the land now enclosed in Northrop Field. Governor Pillsbury, before his last illness, had begun the purchase of the lots in this block and his heirs gave six lots in this block to carry out what they knew to be his wishes. The city council voted to vacate Arlington street from the river to Harvard street and to vacate Union street from Arlington to University avenue for the benefit of the University.

C. J. Rockwood

J. T. Elwell

The legislature of 1907 appropriated $450,000 and the legislature of 1909 supplemented this with an additional appropriation of $350,000 for the purchase of additional land for the campus. The alumni of the college of medicine and surgery assisted by the faculty of that college, raised $40,000 by private subscription to purchase a site for the Elliot Memorial hospital. With this money there has been purchased all of the land to the south of the old campus, extending east to Union street. The Park Board owns a wide boulevard along the river which for practical purposes forms a part of the campus. With the purchase of this additional land and the vacating of certain streets by action of the city council, nearly fifty acres were added to the campus.

Campus Club. This club was organized and incorporated in the early spring of 1911. Any male member of the instructional staff of the University is eligible to membership and others "interested in the welfare of the University" may be admitted. The club was given the use of a house at 112 Church street southeast. This house was remodeled and furnished for the use of the club and has been the home of the club since September, 1911. The house contains parlors, dining room, kitchen and a few sleeping rooms. Meals are served during the college year. The club has recently been given the use of two houses which are to be moved to a point between Pleasant street and the river and just south of the railroad, N. P. tracks and remodeled for the use of the club.

Campus Quartet. One of the most famous of 'Varsity musical organizations.

Edward Borncamp, deceased; Harry O. Hannum, Congregational clergyman, of Holyoke, Mass.; George L. Huntington, a physician, of St. Paul; John Walker Powell, religious work director of the University, were the members of this quartet and were all members of the class of 1893.

Cane Rush.—The annual cane rush which has been held for many years was abolished in 1912 and in its place was substitued a formal contest of athletic skill and a tug-of-war held under the direction of the director of the gymnasium.

Canfield, Harry E., clinical assistant in ophthalmology and otology, 1911 to date.

Cantwell, William Findley, born September 3, 1888, St. Paul; Scotch Irish ancestry; m. Florence M. Selbig; B. S. in chemistry, '11; honor graduate in military department; assistant chemist nutrition laboratory, agricultural experiment station, 1911 to date.

Cap and Feather. An organization of the senior girls of the class of 1912 of the school of agriculture.

Cap and Gown. An organization of senior women.

Carel, Hubert C., instructor in chemistry, department of medicine, 1895-1898; assistant professor of chemistry, 1898 to 1904; professor of chemistry, 1904-07.

Caribou Group. The finest group appearing in the University museum is that of Newfoundland caribou presented to the University by James Ford Bell, '01, in the spring of 1910. Mr. Bell employed expert assistants in securing this group, which represents the Newfoundland caribou as they appear in their native haunts. The background was painted by John A. Corwin of Chicago. Mr. Brandler, the taxidermist, who had charge of the work accompanied Mr. Bell on his trip when the specimens were secured. For a full description of this group see Minnesota Alumni Weekly of April 2, 1911.

Carlson, John S., professor of Scandinavian languages and literatures, 1899-1907. See 1st edition.

Carlyle, Alex., assistant (with rank of instructor) in plant breeding, 1913.

Carnegie Foundation Retiring Allowance—The University is among the institutions which receive the benefit of the pension system of the Carnegie Foundation for the Advancement of Teaching.

The substance of the regulations governing the granting of a pension is as follows:

1. A minimum age limit of 65 years, or,
2. Total disability.
3. Not less than 15 years' service in an institution of collegiate grade.
4. To widow of deceased recipient or person entitled to receive the benefit of the allowance.
5. No pension for teachers in professional departments whose chief work is outside of teaching, nor to any person who continues to receive pay for whole or part time as a member of the instructing staff of the institution.
6. No provision has yet been made for members of the staff of instruction of agricultural departments.
7. Hold rank of professor or assistant professor.
8. Librarians, registrars, recorders and administrative officers of long terms, and who receive salaries ranking them with professors or assistant professors.
9. No allowances less than $1,000 nor more than $4,000.

The allowance is computed as follows:

R equals A-2 plus $400; R equals annual retiring allowance. A equals active pay, that is, the average pay received during the five years preceding the granting of the allowance.

All payments are made through the business offices of the University.

The following named members of the University staff have been granted such allowances:

Dr. William Watts Folwell.
President Cyrus Northrop.
Maria L. Sanford.
Judge Adam C. Hickman.
Dr. Jabez Brooks, now deceased.
Mrs. Jabez Brooks, now deceased.
Dr. Henry T. Eddy.
Mrs. William S. Pattee.
Mrs. Matilda J. C. Wilkin.
Miss Lettie M. Crafts.
Dr. Arthur Edwin Haynes.

Carr, A. B., instructor in medical chemistry, 1905-06.

Carr, W. Frank, instructor in civil engineering, 1884-85.

Carroll, Alice E., office assistant and stenographer in division of agricultural chemistry and soils, September, 1906, to April, 1911; assistant bookkeeper, business office of the department of agriculture, April, 1911, to August, 1911; budget clerk since that date.

Carson, Helen D., head of the serials department, University library, 1907 to 1910.

Cary, Austin, born July 31, 1865, East Machias, Me. Professor of forestry since 1911; A. B., Bowdoin, '87; A. M., '90; surveyor for Maine and U. S. forestry department, 1890-96; forester Berlin Mills Co., 1898-04; assistant professor of forestry. Harvard, 1905-09; state superintendent of forests, New York, 1909-10; member M. A. A., Boston Soc. Civil Eng.; author of forest resources of New England.

Cashman, Thomas E., superintendent of the experiment station at Owatonna since 1903.

Cass, Lucilla, clerk registrar's office, agricultural department, since April, 1912.

Castalian Literary Society, The. Organized November 11, 1896.

Cates, Abraham Barker., born May 12, 1854, at East Vassalboro, Maine. A. B., Colby, 1874; M. D., Harvard, 1880, Principal of Cherryfield, Me., high school, 1874-1877. Adjunct professor of obstetrics, 1888-; later clinical professor of obstetrics and then professor of obstetrics, to 1913; associate professor, same, 1913-; acting head of department, 1913-14.

Cates, John F., engineer, 1894-1903.

Cavert, William Lane, born March 7, 1887, Charlton, N. Y.; Scotch-English-Irish ancestry; Ph. B., Union College, '10; B. S. A., Cornell, '12; instructor in farm management since 1912; made farm management survey of Northfield township, Minn., during 1912; Presbyterian.

Central Debating League, The. Was composed of the debating associations of the University of Michigan, the University of Minnesota, Northwestern University, and the University of Chicago. Its purpose was to discuss in public leading questions of the day and to develop ready and forceful speakers. The four universities were arranged in two groups for the semi-final debates, which were held the second Tuesday in January. On the first Friday in April in each year, the winners from the groups met in a final debate in the city of Chicago. Minnesota withdrew from this league in 1906 and proceeded at once to organize the new Central debating circuit of America.

Central Heating Plant. The total cost of the entire plant, including all tunnels, shafts, building, smoke stack and equipment was $255,000, of which amount approximately $45,000 was expended on deep tunnels and shafts. The length of main tunnel is 3500 feet; length of chemistry branch tunnel 1,000 feet; size of deep tunnels 6'-6" wide by 7'-6" high. Sub-surface tunnels vary from 5 feet wide by 6'-6" high to 6'-6" square. The sub-surface tunnels are built of concrete reinforced with steel.

The deep tunnels are approximately 100 feet below surface of campus and are excavated in the sand rock of the St. Peter formation. There are seven shafts approximately 4 feet in diameter, extending from the surface of the campus to the deep tunnel 100 feet below; the shafts are located about the center of certain groups of buildings which they serve.

The mechanical equipment consists of six 350 H. P. water tube boilers arranged in three batteries of 700 H. P. each. The boilers have been designed to carry 175 pounds working pressure which will make them available for power purposes in the future, if this be desired. For the present, the pressure carried is only 85 pounds and the steam at this pressure is carried thru mains to the various shafts and to the several buildings on the campus. The pressure is reduced at the buildings to one or more pounds, as required to circulate the steam in the respective buildings. The largest pipe used in the system is 14" in diameter. A system of return mains is employed by which all of the water of condensation is returned to a 7,000 H. P. feed water heater, placed in the power plant. The returns are pumped from the feed water heater to the boilers and a little make-up water is used to compensate for leakage.

A recording measuring tank capable of measuring 300,000 pounds of water in 24 hours is also installed in the heating plant, and all of the water is measured on its way to the boilers.

The coal is delivered on a side track built by the University and the cars are emptied into a coal hopper whence the coal passes thru a crusher and is delivered on to a rubber belt which carries the coal into the boiler house and delivers same to the coal bunkers located above the boilers. The bunkers have a total capacity of 800 tons. The coal is fed from the bunkers into an automatic weighing coal hopper which permits the amount of coal fed to each boiler to be determined accurately.

The boilers are all furnished with automatic chain grate stokers, which can be regulated as the demands require.

An additional coal storage space is provided outside of the boiler house which has a capacity at the present time of 2500 tons. Still additional storage space is provided on the level above the power plant which will take care of 8,000 tons more.

A reinforced concrete stack serves all of the boilers and is designed for a total capacity of 4,500 H. P. The stack is 11½ feet inside diameter at top and has a total height of 234 feet. The plans contemplate an additional stack of the same dimensions to be built when the demands shall require it; it is also intended to install ten additional boilers of the same size as those now in place. Thus the completed plant will have a nominal capacity of 5,600 H. P. and an overload capacity of about 9,000 H. P.

There are a number of features which will be added to the heating plant when funds become available, so that when the equipment is all installed it is expected that the University heating plant will be the best of its kind in the Northwest.

The deep tunnels and shafts were designed and constructed under the supervision of Dean Shenehon, of the college of engineering; the rest of the work was done under the direction of Professor Flather of the mechanical engineering department.

Challman, S. A., special lecturer in college of education, 1913.

Chamber Music Concerts. A series of concerts devoted to the interpretation of classical composers, offered during the season of 1894-95. Miss Elizabeth Cushman presided at the piano, Mr. Heinrich Hoevel, played the violin and Dr. Clarence

Strachauer, the 'cello. The concerts were arranged by Professor Harlow Gale, who, on each Friday afternoon, preceding the concerts, gave a lecture on the psychology of music. The lectures were partly historical and biographical, and, in addition, a demonstration of the anatomy and physiology of hearing, an outline of the psychology of music and some experimental and statistical work in rhythm, melody, and harmony.

Chancellor. This office was provided for under the organization of 1851 to March 4, 1864. Rev. Edward D. Neill, the only person holding this office, was appointed in the fall of 1858 and resigned July, 1861.

Chapel Exercises. From its very beginning down to 1911, the University authorities conducted daily religious services. In the early days attendance was required, but since about 1885 attendance has been voluntary. The exercises have always consisted of a short scriptural selection and prayer. University notices are given at these exercises and frequently prominent men and women talk to the assembled students. Naturally the attendance is largely from the so-called academic department of the University, but on special occasions students from all departments fill the chapel to overflowing. Since 1911 chapel exercises have been held every other day —Mondays, Wednesdays and Fridays, with some special feature for each day. These special features include addresses, musical programs, mass meetings, etc.

Chaplain for University Work of the Episcopal Church. Episcopalians maintain a University House and a Chaplain. The Rev. Stanley Kilbourne, Rector of Holy Trinity Church, 4th Avenue and 4th Street, southeast, is the Chaplain and he has been in charge since the fall of 1907. The house is located at 703 4th Street southeast.

Chapman, Esther, assistant in rhetoric, 1909-11.

Chapman, Herman H., superintendent of the sub-station at Grand Rapids, 1897-02; instructor in forest exploitation, 1902-04.

Chapman, Norton Everett, born September 27, 1858, Byron, Mich.; father English descent, mother, Holland descent; m. Frankie E. Crowther; two sons; poultryman, 1913-; Colgate University one year; Chicago University A. B., '85; Denison University, B. D. and A. M., '88; teacher Cedar Valley seminary, Iowa. Grand Island College, Nebr.; 10 years pastor of Baptist churches; lecturer on farmers' institutes, poultry specialist, agricultural extension division; publications, Lessons on poultry culture, Extension bulletins; poultry editor Northwestern Agriculturalist; national lecturer and member State butter and cheesemakers' association, D. K. E., life member American poultry association, member state poultry association, state dairymen's association, International association poultry instructors and investigators; Baptist.

Charlton, Alice, cataloger, 1912 to date.

Chase, Raymond P., instructor in rhetoric, 1904-05. Graduate of the University, class of 1903.

Chatterton, Carl C., assistant in orthopedia, 1913-.

Chemical Laboratory Building. This building was erected in 1890, for the use of the department of chemistry and physics, and was remodelled in 1902, when the department of physics vacated the building. The first cost of the building was $81,500; the cost of remodelling was $8,000, making the total cost practically $90,000. The building has a frontage of 190 feet and

provides for the department of chemistry, with its various laboratories, lecture rooms, amphitheatre seating 345 students, offices, seminar room and class rooms, storage and preparation rooms, dark rooms, etc. It is constructed of a romanesque brick of light reddish yellow tint with iron spots. L. S. Buffington was the architect. The legislature of 1913 appropriated $17,500 to remodel this building for the use of the Minnesota Union.

Chemistry Museum. A cabinet of specimens illustrating the products and processes of Applied Chemistry is being collected by the Professors of Chemistry, as opportunity offers. The collection embraces fuel, ores, furnace products, textile materials, both raw and manufactured, dyewoods and other materials used in dyeing; specimens illustrating the bleaching and printing of cotton, linen, and woolen goods, earthenware, pottery, etc.

Chemistry, The School of. This school did not exist, as an independent organization until 1903. Prior to that time it existed as an attachment to some other college. Provision was originally made for instruction in a complete course in 1891, when the college of engineering was reorganized and made the college of engineering, metallurgy and the mechanic arts. In the course of study, as then established, there was a full four-year course in chemistry but it was not until the following year that the first student elected this course. When the re-organization of 1896 took place, the school of chemistry was established as the school of technical and applied chemistry and was made a subsidiary organization in the college of science, literature and the arts. It existed in this way until 1903 when it was made a separate organization, with its own faculty and dean and independent in the government of its internal affairs. George B.

Frankforter, Ph.D., professor of chemistry, was made dean. The school of chemistry, as it is now known, offers three courses of study. A four-year course in analytical chemistry, leading to the degree of bachelor of science, in chemistry; a five-year course in arts and chemistry leading to the degree bachelor of arts at the end of the fourth year and the degree bachelor of science, in chemistry, at the end of the fifth year; a third five-year course in applied chemistry leads to the degree bachelor of science at the end of the fourth year and chemical engineer at the end of the fifth year. The school has an enrollment of 108 and a faculty which includes forty-six professors and assistant professors and twenty-five instructors.

Cheney, L. S., instructor in agricultural botany, 1903-04.

Chesnutt, Jay L., instructor in rhetoric, 1913-.

Cheyney, Edward G., born November 24, 1878, Washington, D. C.; English and French ancestry; m. H. Frances Porter; two daughters; A. B. Cornell, '00; Yale forestry school, '04-'05; year and a half in the U. S. forestry service; instructor, '05-'07; assistant professor, 1907; professor, 1911; director of the college of forestry; publications, Farm forestry, written in collaboration with Professor J. P. Wentling; member, Society of American foresters; Episcopalian.

Chidester, Wilbur, invoice clerk, business office, 1912 to date.

Chi Psi. The oldest fraternity at the University. Alpha Nu chapter established 1874. Lodge located at 1515 University avenue southeast. National fraternity established in 1841, at Union College.

Chi Rho Theta fraternity was organized December 5, 1905, as the Bishop Gilbert Society. It has a membership of thirty. Its purposes are religious, scholastic and social. Its field of activity is among the Episcopal men of the University. It endeavors to develop them spiritually, scholastically and incidentally provides a few social affairs for them. The society was reorganized May 28, 1912, as the Bishop Gilbert Chapter of Chi Rho Theta fraternity. It purposes to establish a national organization in the various universities and colleges of the country.

Choral Union. A musical organization which was founded in 1893 by Fraulein Schoen-Rene. The first concert was given May 1, 1894, at the Coliseum and May 2, at the People's Church, St. Paul. At these concerts, Nordica, Hegner and Wetzler, assisted; June 2, the same year, a grand concert was given in the Coliseum. During the year 1894-95, chamber music concerts were provided, under the direction of Professor Gale. November 29, 1895, the choral union gave a concert at the old exposition building at which Melba, and other world-famous artists appeared. On December 14, 1896, at the Lyceum and the next evening at the Peoples' Church, in St. Paul, the union gave concerts, at which Madame Lillian Nordica-Doehme and Charles Gregorowitsch appeared on the program. May 17, and 18, of the following year, the great May festival was held. At this concert Madame Blauvelt, Mrs. Bloodgood, Mr. Berthald, Mr. McKinley, Mr. Mayn, and Sig. Campanari, Mr. Morenhaut, Miss Little, Miss Stewart, Miss Spencer and Mme. Calve, were soloists. November 22, 1897, occurred the long to be remembered Blauvelt concert, at the Lyceum. Anton Hegner, the celloist, assisted. The records do not show any later activity of this organization.

Chowning, William M., junior demonstrator of pathology and bacteriology, 1901-04.

Christianson, Peter, instructor in assaying, 1891-92; instructor in metallurgy, 1892-1905; assistant professor of assaying, 1905-1908; professor of metallurgy to date.

Christison, James Trent, born at Southampton, England, October 21, 1865; son of James and Isabella Smith Christison; clinical instructor in diseases of children, 1897-1901; clinical professor of same, 1901-1906; professor of same, 1906 to 1913; professor emeritus to date; attended University of Michigan medical school, 1887-89; M. D., Long Island College Hospital, N. Y., 1890, and University of Minnesota, M. D., 1901; member, Minnesota Academy of Medicine, County, State and American medical associations, Nu Sigma Nu, Mason and Shriner; member B. P. O. E., and the Minnesota and White Bear Yacht clubs.

Church Club. Founded by the Episcopalians in 1911 to serve the women of the University, in particular, those of Episcopalian affiliations.

Churchill, Alta, assistant in English, 1909-12.

Chute, Richard, St. Anthony, Minneapolis. Regent August 17, 1863-March 4, 1864, also 1876-October 20, 1881. Secretary of the board for a number of years.

Circus. University circuses were given in 1903, 1904, 1905, and 1913. Those of '03, '04 and '05, were put on under the direct supervision and responsibility of Dr. Louis J. Cooke, director of the gymnasium and were staged in the University Armory. They were all very successful, from the point of view of arousing interest and furnishing a satisfactory spectacle; financially they broke about even. The Minnesota Daily of those years will give full information as to details.

The Circus of 1913 was given by the Minnesota Union and was an All-Univer-

sity affair. Dr. Louis J. Cooke, the director and moving spirit was assisted by E. B. Pierce and Ira Swanman, who together bore the chief responsibility for the affair which was not only a spectacular but financial success as well, and enlisted the enthusiastic support and backing of the whole student body.

Clark, Addie, instructor in University high school, 1913.

Clark, Greenleaf, appointed to the board of regents, by Governor Pillsbury, December 15, 1879, vice Morris Lamprey, deceased. He was reappointed in 1880, 1883, 1886, 1889, 1895, 1901. Elected president of the board, vice John S. Pillsbury, deceased, December 10, 1901, and held that office until the day of his death, December 7, 1994. See Weekly of December 16, 1901.

Clark, John S., born February 25, 1849, in Nova Scotia, common schools of Nova Scotia, preparatory and academic departments of the University, A. B. '76. Two years graduate work at Leipsig. Taught for four years in common schools of Nova Scotia; assistant librarian of the University, 1874-77; instructor in Latin, 1876-80; assistant professor, 1880-1886; professor, 1886 to date of his death, September 6, 1913.

Clark, Thomas A., instructor in mathematics and civil engineering, 1899-01. Born in Iowa, 1876. Graduated from Purdue University, 1897, with a degree of B. S. Served as assistant in Civil Engineering at Purdue for two years and took his degree of C. E. in 1899.

Clarke, George E., professor of theory and practice of (homeopathic) medicine, 1894-05.

Class Day Plays. The custom of giving a class play usually in a theatre was begun by the class of 1891, when they gave their play, A Picture of 'Varsity life, in the University chapel, June 2, 1891; May 31, 1892, Helen, Paris and the Apple, at the Grand; 1893, the Princess, adapted from Tennyson; June 4, 1894, Wheels, or Jufashyfoamalafe, Peoples' theatre; June 3, 1895, Olympia up to date, at the Metropolitan; June 1, 1896, Idyllia, at the Lyceum; May 31, 1897, Mr. Cramlet of Goribattledor, at the Lyceum; May 31, 1898, A bachelor girl of laws, at the Lyceum; 1899, Rediviva; or, The return of college spirit; June 4, 1900, 17 to 6; June 2, 1901, When bugles blow, at the Lyceum; June 2, 1902, The Oneoga, the story of the magic stone, at the Lyceum; June 1, 1903, A sovereign and a copper, at the Metropolitan; May 28, 1904, The apple of discord, at the Metropolitan; June, 1905, The pledgeling, at the Metropolitan; June 9, 1906, A check from home, at the Metropolitan; June 7, 1907, The braino man, at the Metropolitan; 1908, The Thinkolodeon, at the Metropolitan; 1909, The Scarlet Arrow, at the Metropolitan; 1910, Knowland, at the Metropolitan; 1911, Initiated, at the Metropolitan; 1912, The Girl from Away, at the Metropolitan; 1913, Maiding it for Ma, at the Auditorium.

Prior to 1891 the senior class had given a program, usually in chapel, including a class oration, prophecy, history, poem, songs, etc.

Classical Museum, includes material illustrating classical geography, topography, chronology, mythology, archaeology, and been collected, consisting mainly of plans and charts, casts, pictorial illustrations, facsimiles of manuscripts and inscriptions.

Class Memorials. It seems to be impossible to make anything like a complete list of class memorials. The following statement is as complete as we have been able to make it:

1876, a class tree, marked by a bronze tablet placed on the tree in 1906; 1878, a boulder; 1879, a class tree; 1880, 1881, 1882, 1884, class trees; 1883, an ivy vine; 1885, The University spring masonry work; 1886, a clock; destroyed in the Old Main fire; 1888, The president's chair used in chapel; 1889, a memorial prize in history; 1890, a fellowship fund; 1891, a bust of Dr. Folwell; 1898, a stained glass window in the library reading room; 1900, trophy cases in the rotunda of the library building; 1910, The University song book and $500 in cash to be used for some purpose yet to be determined, possibly to furnish and finish a room in the new Minnesota Union building; 1912, plans not completed, possibly a set of chimes or a scholarship.

Clements, Edith Schwartz (Mrs. Frederick E. Clements), born in Albany, N. Y.; German and French ancestry; attended the University of Minnesota; B. A. Nebraska; Ph. D., Nebraska; instructor in Botany since 1909; research work, Mutations in Chamaenerian augustifolium, Polydemics of Rocky Mountain species; publications, The Relation of Leaf Structure to Physical Factors, Herbaria Formationum Coloradensium, Cryptogamae Formationum Coloradensium, Rocky Mountain Flowers (in press); member Microscopical society, Phi Beta Kappa, Sigma Xi.

Clements, Frederick Edward, born September 16, 1874, Lincoln, Neb. Lincoln high school, '90; University of Nebraska, '94; Master, '96; Ph. D., '98; fellow in botany, 1894-96; instructor in same, 1896-98; Adjunct professor and associate professor, same, 1898-1906; professor plant physiology, 1906-07; President of botanical seminar, 1894-07; secretary of the botanical survey, 1894-07; president of Nebraska Academy of Science, 1907; professor of botany, University, 1907 to date. Author of Histogenesis of Caryophyllales, 1897; Phytography of Nebraska, 1898; second edition, 1900; Manual of High School Botany, 1900; Greek and Latin in Biological Nomenclature, 1902; Development and Structure of Vegetation, '04; Re-

search Methods in Ecology, '05; Plant Physiology and Ecology, '07; also many articles for current botanical magazines. Phi Beta Kappa, Sigma Xi; Botanical Society of America; the American Geographical Association; the American Mycological Society.

Clinical Opportunities in Medicine. Senior students in medicine keep a record of all cases observed during the year, the following is not an exceptional case. Cases observed by a single senior—128, of internal medicine; 39, diseases of children; 144, general surgery; 35, orthopedic surgery; 72, mental and nervous diseases; 104, skin and genito-urinary diseases; 40, nose and throat; 38, diseases of women; 59, eye and ear; 9, obstetrics; total, 668.

Clopath, Henrietta, born and educated in Switzerland. Travelled extensively in Europe studying art at Dresden, Munich, and other art centres. Seven years head of the art departments of the American college in Constantinople. Instructor in freehand drawing 1897 to date; in charge of the department since 1903. Writer and lecturer on art subjects. Had a picture accepted by the National jury of election for the St. Louis World's Fair, 1904. Made a special study of methods of art education in the United States, attending summer schools at Chicago, New York and the normal art school of Columbia University.

Cloquet Forestry Experiment Station. The Cloquet station includes 2640 acres. 2200 acres were presented by the Weyerhaeusers of St. Paul at a cost of $2750, in November 1909, the state purchasing 480 acres additional, of Indian allotments, at a total cost of about $4500. This station was established by act of the legislature of 1903, chapter 130 of the law of that year. The station is devoted mainly to experimental work carried on in co-operation with the United States service to secure results along the following lines: Studies of the physical and climatic factors affecting the growth and distribution of trees; Reforestation; Natural reproduction on burns and cut over lands; Methods of cutting timber so as to secure perpetuation of the desirable species; Model working plan for the management of the timber land within the station; Study of the effect of thinning at different ages of different species upon the growth and yield of stands; Studies of growth, volume, and yield; Observations on the time of budding, flowering, leafing and seeding of the important species at the station; Building up of collections of Forest flora, rocks, soil, insects, fungi, etc.; at the station. There are two buildings at this station—cottages which were erected at a cost of $1400 and $1500 respectively. There is also a barn and shed on the grounds.

Clough, David M., Minneapolis, regent ex-officio, governor, January 31, 1895-Jan. 2, 1899. Born in Lyme, N. H., 1846. Elected to the State Senate in 1886, and lieutenant governor in 1895. Became governor in 1895 upon the resignation of Governor Nelson.

Cloyd, David E. Instructor in pedagogy, 1900-02. Graduate of the University, class of 1901. Since then engaged in educational work at various places.

Clure, Wilford Oscar. Instructor in Rhetoric 1999 to 1913.

Clyde, Mrs. M. C. Professional nurse, college of dentistry, 1906 to date.

Cobb, Frederick E. Assistant in technics and clinics, college of dentistry, 1895-96.

Cobb, Sheridan Grant. Born August 14, 1862, at Cascade, Minn. District school of Cascade, Niles' Academy, Rochester, Hahnemann College, Chicago, 1884; New York Polytechnic, 1894; Chicago Clinical School, 1898; Vienna General Hospital, 1900. Taught district school. Assistant in Homeopathic clinical medicine, 1903; clinical surgery, 1904; clinical gynecology, 1905 to 1909. Founded Cobb Hospital 1902. Surgeon for the G. N. Ry., N. P. Ry., W. C. Ry., C. & G. W. Ry., C. R. I. & P. Ry., C. M. & St. P. Ry., C. M. & O. Ry., Soo Ry.

Coffin, Mary Lurane, Instructor in music 1911-12.

Cohen, Lillian, born June 19, 1878, Minneapolis. Early education grade and high schools of city. B. S. University, 1900; M. A. '01; Ph. D., '13; one year of graduate work in chemistry at Eidgenos Polytechnic, Zurich, Switzerland. Taught one year in high school. Instructor in chemistry, 1902 to date. Sigma Xi; Phi Beta Kappa, American Chemical Society.

Cohn Library. In 1909 Drs. Chas. J. and Chas. N. Spratt presented to the medical library of the University two thousand titles from the library of Professor Hermann Cohn of Breslau.

Cole, Gordon E., Faribault. Appointed regent 1888, continued in office until his death, October 4, 1890. Lecturer on corporations, 1888-90.

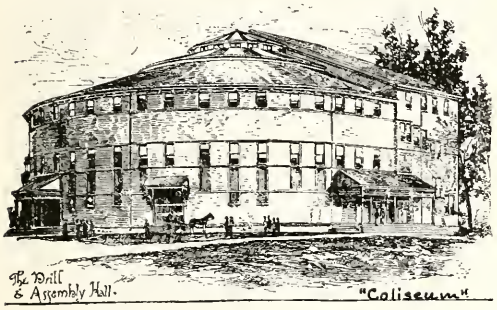
Cole, Haydn, S., 1st Lieut., U. S. A. Professor of military science and tactics, 1900-03.

Colgrove, Vivian, department of loans, University library, 1910 to date.

Coliseum. See next page.

College Court Prize. This prize was offered by Judge A. C. Hickman, of the law faculty, and consisted of $25 worth of standard books on the subject of procedure, and was awarded to that member of the graduating class who should write the best legal argument upon a given legal proposition. This prize was awarded to Ransom J. Powell, in 1898; to John N. Berg, in 1899; and to Frank G. Sasse, in 1900.

Coliseum. This building was erected in 1884, at a cost of $35,000. It was officially known as The Military Building, but was popularly known as the Coliseum. It was so constructed as to serve the purpose of a drill hall and auditorium, and would



seat comfortably three thousand five hundred people. It was entirely of wood construction and was burned July 24, 1894. The cut which appears elsewhere gives a better idea of the building than any verbal description can give. Mr. Buffington was the architect.

College Woman's Club Scholarship. The College Woman's Club of Minneapolis established in 1908, for the benefit of women students in the University. For the year 1912-13 this scholarship amounted to $150. In awarding it preference is given to students in the junior and senior classes and to graduate students. It has been awarded to: 1910-11, Mary Tornstrom; 1912-13, Ammy Lemstrom.

Collins-Childs Gift of Books. In June 1901, Mrs. H. L. Collins and H. W. Childs presented the law library some 700 volumes of attorneys' briefs of the Minnesota supreme court.

Colvin, A. R. Assistant in surgery, 1900-1903; clinical instructor in surgery, 1903 to 1908.

Comfort, Catherine. Instructor in English, school of agriculture, 1901-03; instructor in English and preceptress, 1903-05.

Commencement Addresses and Speakers. The first commencement speaker was the Honorable A. S. Welch, LL. D., president of Iowa State Agricultural College, who spoke upon "Higher education in its transition state." This address was in addition to orations by each of the two members of the class. When the custom of having members of the graduating class deliver orations on commencement day was discontinued in 1899, President Northrop delivered the address and has since delivered the address in 1900, 1902. The addresses for the remaining years have been delivered by the following named gentlemen, 1901, Andrew S. Draper, LL. D., president of the University of Illinois; 1903, James Brooks Dill; 1904, Thomas Wilson, member of the Board of Regents; 1905, Knute Nelson, United States Senator; 1906, Harry Pratt Judson, LL. D., President of the University of Chicago; 1907, William H. Taft, Secretary of War; 1908, F. L. Seely, editor of the Atlanta Georgian; 1909, Maria L. Sanford, professor of rhetoric; 1910, President Cyrus Northrop; 1911, President George Edgar Vincent; 1912, Albert Shaw, of the Review of Reviews; 1913, W. A. F. Ekengren, Swedish minister to the United States and Dr. William Watts Folwell, first president of the University.

Commencement, The First University. An account of the first University commencement is published in appendix "A" of the regents' report for 1873, pages 45 to 52.

Company Q. A company of young women who wore a military costume and who pursued a modified form of the military drill prescribed for young men. This company was organized in 1889 and a picture of the company may be seen by consulting the Gopher of 1890, opposite page 127.

Comstock, Ada Louise, born December 11, 1876, Moorhead, Minnesota. Moorhead high school, 1892; University, 1892-1894; B. L., Smith College, 1897; Moorhead Normal School, 1898; M. A., Columbia, 1899; Sorbonne and College de France, 1903-1904. Assistant, Department of rhetoric, 1899; instructor, 1900; assistant professor, 1904 to 1909; professor to 1912; dean of women, 1907 to 1912. Member of Delta Gamma; Phi Kappa Psi, of Smith College; Association of Collegiate Alumnae; Woman's Club of Minneapolis; Alumnae Association of Smith College and University of Minnesota. Now dean of Smith College.

Comstock, Alfred Erwin, born February 21, 1872, Fayette, Ia. Graduate Fayette high school; B. S. Upper Iowa, 1895; M. S. '98; Hahnemann Medical College, Chicago, 1899; taught in common schools, high school one year, and demonstrator in chemical laboratory Hahnemann, for three years. Lecturer on clinical and orthopedic surgery (homeopathic) 1898 to 1901; professor of regional surgery, 1901-1908; professor of surgery 1908-09. Author of Pathology vs. diagnosis; Race division and its influence upon derivation and temperament; Some experiments with paraffin. A study of blood in surgical diseases. Visiting surgeon to the City and County Hospital, St. Paul; president of the Minnesota State Homeopathic Institute, 1907; president of the St. Paul Homeopathic Hospital Club, 1906; ex-president of the Homeopathic Society.

Comstock, Elting Houghtaling, born June 26, 1876, Milwaukee, Wis. B. S. Wisconsin, 1897; Oliver Graduate Scholar, Cornell, 1897-98; Fellow in mathematics,

Chicago, 1898-99; Honorary fellow in mathematics, Wisconsin, 1899-1900; M. S., University, 1907. Taught in high school, Superior, Wis., 1900-01; principal of Houghton, Mich., high school, 1901-03; superintendent of same, 1903-06. Instructor in mathematics school of mines, 1906-07; assistant professor '07-'08; professor of mathematics and mechanics to date; head of department 1913.

Comstock, S. G., Moorhead. Appointed regent as the last official act of Governor Van Sant, January, 1905. Term expired March, 1908. Born May 9, 1842, Argyle, Me. Educated in common schools and Hampden Academy, Me., and Wesleyan Seminary. Admitted to bar in 1871. County attorney of Clay county, 1872-78; member of Minnesota House of Representatives, 1875-82; member of Senate, 1882-88; Congressman from 5th Minnesota district, 1889-91.

Condit, William Henry, born August 4, 1872, Jersey, Ohio. B. S., University, 1896; M. D., 1899. Instructor in materia medica, University, 1896-07; clinical instructor in therapeutics, 1907 to 1913.

Conditions at the University. W. F. Webster, 1886, principal of the east high school of Minneapolis read a paper before the Six O'clock Club of the city in the early spring of 1906. This paper was repeated, by special request, in the University chapel, later in the spring. It was reprinted in the Minnesota Alumni Weekly of May 21 of that year. This address was one of the factors responsible for the strenuous campaign for an increase of salaries of University professors, which was made by the alumni in 1907.

Congressional Land Grants. In his second message to the legislature, in 1851, Governor Ramsey recommended the establishment of a University and added—"As an endowment of a University will also naturally, in this connection, attract your attention, it might be proper to further memorialize Congress for a grant of 100,000 acres of land, applicable and available at a future day, for this most desirable object. The propriety of urging, at this time, the request, arises from the importance of making early selection, with a view to securing a fair proportion of choice lands." This memorial was passed on the 10th of February and Congress passed an act upon the 19th of the same month, reserving two townships for this purpose. The title to this land did not vest in the state until the act of March 2, 1861, donated what had previously been reserved for this purpose. The University received from this grant, 45,257.39 acres of land. Of this amount 15,410.85 acres were sold by the regents, under authority of the acts of 1862, 1864 and 1866, to pay the debts of the territorial institution. So this grant netted the University 29,796.54 acres. The second grant, by act of Congress approved July 2d, 1862, gave the state 120,000 acres for the endowment and support of an agricultural college, including instruction in mechanic arts and military science.

An act of the Legislature of Minnesota, passed March 10, 1858, set aside lands in McLeod county for a site for an agricultural college and for an experimental farm. This institution was to be under the control of the president and executive committee of the state agricultural society. In 1861 the state donated to this college all the swamp lands of McLeod county. Nothing was ever done toward organizing a college at this place. The congressional grant of 1863 was accepted and the lands located and, because the affairs of the University were in such unsettled condition, these lands were made over to the agricultural college at Glencoe, in 1866. The following year, the special board of three made a report showing a wiping out of the debt of the University and 32,000 acres of the territorial grant still untouched. Through the good offices of Regent Pillsbury, then senator, the two grants were consolidated and given to the University. It was provided that the swamp lands granted to the McLeod institution, which amounted to 4,684 acres, should remain in the possession of that institution as an endowment of Stevens Seminary.

By virtue of the act of February 18th, 1868, the act reorganizing the University and under which, with some amendments the University now exists, these lands were made over to the University.

These lands were chosen and certified to the University as follows: 68,928.08 acres at the minimum or single value, mentioned in the act, and 25,511.20, at double the minimum value, counting as 51,022.40 acres, making the total 119,950.48 acres, under the terms of the grants. The actual number of acres received being 94,439.28.

The third grant, being really the second grant in point of time of the act of Congress making the same, was that provided for in the enabling act authorizing the people of the territory to set up a state government, passed February 26th, 1857, which granted two townships for the endowment of a state university.

So far as appears no effort was made to secure for the University the land it was entitled to under this act, until the Reverend E. D. Neill, who was at that time chancellor of the University, brought the matter to the attention of Governor Ramsey and in a communication dated April 5th, 1860, set forth his views concerning the right of the University to 72 sections of land under the Enabling Act. Governor Ramsey took up this matter before the commissioners of the general land office who ruled against the University. Here the matter rested until the special board of three regents was created by the act of 1864. This board immediately took action to secure the rights of the University under this act and at their request Governor Miller filed notice of the selection of

a portion of said grant in the proper office in Taylor's Falls in February, 1864, in order to test the validity of the claim of the University to these 72 sections of land.

The commissioner of the general land office rendered an adverse decision. The regents appealed from the decision of the commissioner to the secretary of the interior and Governor Marshall volunteered to bring the claim of the University before the secretary and made a visit to Washington for the purpose. No decision was reached at that time and it was recommended that the regents employ an attorney to prosecute the claim of the University before the department. Under authority of an act passed February 18th, 1867, the regents employed Mr. H. B. Beard to conduct the case on a contingent fee of three sections (1914 acres) of land to be selected by him. The secretary was finally persuaded that the claim of the University was just but did not feel warranted in reversing the decision of the former officer of the department and recommended a bill be introduced into congress allowing the University the 72 sections of land. Through the influence of Mr. Beard and the Hon. Eugene M. Wilson, representative in congress, and Hon. Alexander Ramsey, in the senate, this bill finally became a law July 8th, 1870, and these lands were made available for the endowment of the University.

A question was raised as to the right of the regents to employ the methods they did to secure this grant of land from the government, especially involving the agreement with Mr. Beard. This matter was held open for six years and was finally settled by an act of the legislature February 17th, 1876, "legalizing a deed made by the University of Minnesota to Henry B. Beard as compensation for his services as counsel in prosecuting the claim of the state for 72 sections of land for a state University."

Afterward, there was another ruling of the interior department, in which it was held that since 9,764.60 acres of the territorial grant had not been selected and certified, until after the admission of the state into the Union, this amount should be charged against the second grant, reducing the number of acres available under that grant, to 37,079.24. This ruling was later overruled, and the University finally received 46,317.6 acres.

Owing probably to the fact that the records of the early days were not kept with sufficient exactness, many pieces of land chosen by the regents were afterwards entered by settlers and the settlers were given the preference in the matter and the regents were afterwards allowed to select other lands to replace those lost in this way. Many thousands of acres of land had to be thus duplicated.

1st Territorial	45,257.39
2nd Agricultural	94,439.28
3rd State enabling act	46,317.60
Total lands granted .	186,014.27

Sales — Agric. lands, all, ...	94,439.28	
Other grants	72,748.92	
Unsold, 1913, ...	18,826.07	186,014.27
Sold to pay debts	15,410.85	
To Beard for lobbying	1,914.00	17,324.85
Total for endowment		168,689.42

It is claimed by the University that there are still 635.01 acres due the institution, under these grants, which have not been located.

December 22nd, 1868, the Board of Regents reported 1,690 (1,689.69) acres unsold and all debts paid but the claim, mortgage, of Paul R. George, principal being $3,000 and interest long past due, on account of purchase of the original campus.

The Board of Regents provided for by the act of reorganization of 1868, placed the settlement of the claim of Paul R. George in the hands of Governor Pillsbury. He had available to sell to pay this claim, 1,529.69 acres of land.

In 1872 Governor Pillsbury acting for the regents, succeeded in making an arrangement with the estate of Paul R. George to satisfy the mortgage held by the estate upon the original site of the University.

The original mortgage made October 23, 1854 was for three thousand dollars in the form of three notes secured by a mortgage, each note for one thousand dollars, one due in six months, one in twelve and one in eighteen months. The mortgage was finally satisfied May 3rd, 1872 and the satisfaction acknowledged the receipt of $5,627.02. The regents' record shows that Governor Pillsbury was authorized to settle this claim with the funds in his hands as chairman of the executive committee. At that time there were $528.42 (In this is included the proceeds of a later sale of 160 acres of land.) in the fund from the sale of lands authorized to be sold to pay the original indebtedness of the University. The records do not show, so far as we have been able to determine, where the money came from with which Governor Pillsbury paid the estate of Paul R. George to get the satisfaction of the mortgage. The $528 was carried along in the University accounts until 1886 when it was finally turned in to the agricultural account in order to close the account and the legislature of 1883 passed a law authorizing the regents to take out of the money to be raised from the sale of the old University farm not to exceed $2,000 to settle the balance due on the Paul R. George account. The records show that $1,773.83 were paid in 1883 to close this account.

The latest report of the State Auditor shows that the agricultural land grant has all been sold, netting the permanent endowment fund $570,747.50. The other grants have netted this fund $994,139.44, or together a total of $1,564,886.94.

Constant, Frank Henry, born July 25, 1869, Cincinnati, Ohio, educated in public schools, Woodward high school of Cincinnati; C. E., University of Cincinnati, 1891. Instructor in structural engineering, University, 1895; assistant professor of structural engineering, 1895-1907; professor 1897 to date. Also assistant engineer, King Bridge Co., 1891-1893; structural engineer, Osborn Engineering Co., 1893-1895; various other professional engagements during vacations. Member Sigma Xi, Beta Theta Pi; American Society of Civil Engineers, Society for the Promotion of Engineering Education. Author of engineering papers for engineering periodicals.

Cook, Edward Albert, assistant professor of Rhetoric 1909 to date.

Cook, Estelle. Partial course in University. Instructor in English, school of agriculture since 1905.

Cook, Henry Wireman, instructor in clinical medicine 1912-13.

Cook, Paul Burns, instructor in Genito-Urinary diseases 1911-13.

Cooke, Louis Joseph, born February 15th, 1868. Toledo, Ohio. Public schools of Toledo; private instruction, two summer sessions Y. M. C. A. Training school, Springfield, Mass.; M. D., University of Vermont Medical Department, 1894; eight years Y. M. C. A. physical director; director of the University gymnasium to 1913; medical examiner and director of physical education for men since 1913.

Coon, George M. Clinical instructor in genito-urinary diseases, 1895 to 1909.

Cooper, Florence, cataloger 1907 to 1911.

Cooper, Thomas H., instructor in agriculture 1908 to 1912; farm demonstrator to 1912. Now director of the better farming association of North Dakota.

Cooperman, Oscar, instructor in prosthetic dentistry 1912-13.

Corbett, J. Frank, born in Chippewa Falls, Wis., Scotch ancestry; m. Nellie Yates; three years general college course; M. D. '96; bacteriologist city of Minneapolis; private practice; staff of Swedish hospital, Asbury, City, St . Mary's; assistant professor of surgical pathology, '07-'13; associate professor experimental surgery, '13; 1st lieutenant reserve medical corps, U. S. A.; research work and publications upon the kidney, blood vessels; member Hennepin county and state medical associations, Minnesota academy of medicine, Pathological society; Presbyterian.

Corniea, Francis A., born November 5, 1889, at Plato, Minn.; French ancestry; B. S. Agr. '11; instructor in agronomy and farm management 1912 to date.

Cornish, W. D. Lecturer on life and fire insurance, 1888-1894.

Corson, Juliet. Lecturer on domestic economy, 1883-84.

Cosmopolitan Club was established in 1910 and has a membership of eighteen. Its purpose is the promotion of fellowship among foreign students attending the University and the stimulation of the idea of international conciliation in place of war. Monthly meetings are held, frequently with outside speakers, and it purposes to follow world movements. The society admits associate members from among former students of the University.

Coulter, John L., instructor in economics and politics 1908-09; assistant professor 1909-10. Resigned to accept a position in the United States department of agriculture.

Country Fair. Was held on the Campus of the department of agriculture May 18th, 1912. The affair was planned and carried out by members of that department and presented in form of a country fair the life and activities of the department of agriculture. The attendance was something like three thousand and the whole affair from beginning to end was an unqualified success. For fuller statement concerning this see the Minnesota Alumni Weekly of May 20, 1912. Also the Gopher of 1914.

Countryman, Ralph W., clinical assistant in operative dentistry 1911 to date.

County Agricultural Work. The county agricultural work in Minnesota was started in November 1912. The state and federal governments and the Council of Grain Exchanges co-operate in this work. The plan is to have a practical agriculturist located in each county in the State to assist in general work in farm management and the supervision of all lines pertaining to agriculture in the county. The work is under the direction of the University. The county agricultural agent assists the Farmers' clubs in securing pure seed grains, good live stock and encourages the growing of clover and alfalfa where practicable. Assists in planning farmsteads and buildings, orchards, windbreaks, crop rotations, buying and selling associations and in a general way makes himself useful to the farmers in the various ways in which such an expert can be useful.

County Fair Extension Work. In the fall of 1911 demonstration tents were sent to fifteen county fairs by the agricultural department. These fairs are becoming more and more an educational influence in the state. The judging of exhibits is another form of service which the extension department is increasingly called upon to provide.

Covell, Grant A. Instructor in mechanical engineering and woodworking, 1888-89.

Cowie, Gray, statistician, Cokato, 1913 to date.

Cox, Norman Jeffrey, born November 30, 1873, at Centerville, Wis.; son of Reverend Charles and Anne Johnson Cox; m. Stella E. Lynch; twin girls; instructor in operative dentistry, 1905 to 1912; assistant professor of same, since 1912; B. S., Minnesota, '98; M. D., same, 1901; has been engaged in general practice since graduation; member Minnesota State Dental Association, Minneapolis Dental Society and Delta Sigma Delta.

Cox, William T., state forester, special lecturer in forestry, 1912-.

Crack Drill Squad was established in October 1905, by Captain Sprague, formerly a member of the fancy drill squad at Shattuck. Its membership includes a captain, sixteen men and one or more substitutes, all active members of the cadet corps. Its purpose it to promote a military spirit in the cadet corps and the presentation from time to time of an exhibition drill, showing the results of faithful practice, concentrated attention and united action. The squad gives two informal dances each year. It gives exhibition drills at the Military ball, on government inspection day, and on other occasions when called for. The squad of 1912-13 filled a week's engagement at the Minnesota State Fair. Membership in the squad is highly prized, not only on account of the military training it affords, but also for the good fellowship that exists between the members of the squad and alumni members. An annual picnic for active and alumni members is held near the close of each college year.

Crafts, Lettie May, born Minneapolis. Educated in public schools; B. L., University, 1881; graduate study along historical and linguistic lines; special course in library science. Teacher, Albert Lea High School; assistant librarian, University of Minnesota, 1883 to 1911. Member of Phi Beta Kappa; Minnesota Library association president, 1906-07; Twin City Library Club; American Library Association; Board of Directors, Minneapolis Public Library, 1900-06; secretary of board, 1903-07.

Craig, George. Instructor in animal husbandry, school of agriculture, 1905-06.

Craig, Hardin, born June 29, 1875, at Owensboro, Ky.; father Scotch, mother American; m. Gertrude Carr; one son. Professor of English since September 1910; A. B., Centre Colleye, Ky., '97; A. M., Princeton, '99; Ph. D., Princeton, '01; instructor in English, Princeton, '01-'05; Edgerstone preceptor in English, Princeton, '05-'10; graduate work at Princeton, Chicago, Oxford and research work in the Coventry Plays; has published Two Coventry Plays in early English text. Little masterpieces of poetry with Dr. Henry van Dyke; editions of Henry V., Richard II, Arnold's Sohrab and Rustum, Byron's poems, and various magazine articles; member Kappa Alpha, Modern language association of America, Campus club; Presbyterian.

Crawford, B. Vincent, instructor in rhetoric 1913-.

Credicott, H. J. Assistant instructor in cultures and starters 1904-05; instructor in dairy manufacture, 1905-.

Croft, Elmer, assistant department of loans, University library, 1909 to date.

Cross Country teams. Minnesota took part for the first time in an intercollegiate cross-country run, in November 1909, at Chicago, winning first place. The following year, 1910, Minnesota took second place. In 1911 and 1912 Minnesota took 3rd and 4th place respectively. The first cross-country run at the University was won by M.D. Clark, who made 5 miles in 31 minutes and 17 seconds.

Cross, John Grosvenor, born May 8th, 1870, at Rochester, Minn.; son of Edwin Childs and Fanny Marcy Cross; m. Frances Montgomery; one daughter and two sons; clinical instructor in medicine —— to 1911; clinical professor of same to 1913; B. S., Minnesota, 1892; M. D. Northwestern, 1895; M. S., same, 1895; 1902-3, graduate work in Europe; has practiced medicine in Rochester and Minneapolis since 1895; member board of directors of the Associated Charities of Minneapolis; member, Minneapolis, Minikahda, Commercial, and Six O'Clock clubs; Chi Psi, Nu Sigma Nu; affiliated with Episcopal church.

Cross, Nellie M. Instructor in physical culture, 1895-97. Now Mrs. T. M. Knappen.

Crothers, Bronson, assistant in pediatrics 1913-.

Cutler, Alvin Sayles, born at Pittsford, Mich., March 19, 1879; New England ancestry; m. Myrta Ruth Marshall; one daughter; instructor in civil engineering 1907-10; assistant professor of railway engineering '10 to date; C. E. '05; has had professional experience in construction, valuation, etc. of railways since 1900; published articles relating to valuation of railway property; member Sigma Xi, committee on bridges and of track elevation committee of the Civic and commerce association, associate member of American society of civil engineers, American railway engr. association; Baptist.

Cutts, George, clinical assistant in medicine 1910-12.

Cutts Rollin E. Assistant in surgery, 1895-97; assistant in clinical medicine, 1897-98; clinical instructor in obstetrics, 1898-99; clinical instructor in gynecology, 1899-02. Died, March 19th, 1902.

Cuzner, Edwin Anthony, was born in Somersetshire, England, in the village of Beckington, where Thomas a'Becket is supposed to be buried, whence is derived its name, April 12th, 1850. His whole life, until he came to the University was spent in the nursery and seed business founded by his mother's family in 1750. The house of Bourne & Sons continued in business until just a few years ago, having been continuously in the same line of business for more than a century and a half. Mr. Cuzner came to the University in charge of the plant house, as superintendent, in 1883. Though he has been shifted about a number of times in the years since that date, he has always been in charge of the plant house and was for a time superintendent of grounds as well. At the present time he is superintendent of the plant houses and devotes his whole life to the care of the plants. Outside the faculty he is the oldest University officer in point of service, and only two members of the faculty antedate the years of his appointment.

Dahlberg, Robert Chester, born March 5, 1891, at Fergus Falls, Minn.; Swedish ancestry; B. S. in agriculture, '13; seed analyst of department of agriculture 1913 to date. Baptist.

Dairy Hall. This building was erected in 1891 at a cost of $30,000. Additions have been made to it so that now it represents an investment of $45,000. It is 69 x 122 feet and provides accomodations for the department of dairying, including recitation rooms and offices. It is two stories high with basement and is built of red pressed brick.

Dairy School. Was established in 1891-92. It is a special technical school for dairymen actually engaged in dairy work. The course consists of four weeks' work. One year of actual practice in creamery work is required for enrollment. Eight times out of ten, graduates of this school have won the banner for the highest average score at national contests. The work is wholly of a practical nature, every hour of the working day being devoted to the work. 1832 persons have completed courses at the Dairy School.

Dakin, W. W. Instrument maker, college of engineering, 1895-98.

Dalaker, Hans H. Instructor in mathematics, 1902-06. On leave of absence, 1906-08, studying at Cornell and acting as instructor. Assistant professor of mathematics 1908 to date.

Dalrymple, Oliver, St. Paul. Regent 1872-74.

Damon, George Myron, instructor in prosthetic dentistry and dental anatomy 1907 to 1913; assistant professor, same, to date.

Daniels, Farrington, instructor in chemistry, 1911-12.

Danielson, C. A., dairyman at Crookston experiment station, 1907-1911.

Danielson, H. R., department of farm mechanics since 1906.

Dart, Leslie O. Assistant in pediatrics 1902-06; clinical assistant in diseases of children, 1906 to 1909; clinical instructor in pediatrics to 1913.

Dartt, E. H. S. Superintendent of the experiment station at Owatonna from 1887 to 1903.

Daum, Henry Arno, scholar in physics 1911-12.

Davey, Lester A., budget clerk, business office, 1913 to date.

Davidson, R. S., hospital steward 1911-.

Davies, James, instructor in German 1909 to date.

Davis, Alfred, scholar in astronomy, 1911-12.

Davis, E. C., instructor in agricultural education since 1913; graduate of Iowa State college of agriculture at Ames, Ia.; instructor in agriculture in the high school at St. Peter, Minn.

Davis, Edward W., instructor in mechanics and mathematics, school of mines 1912 to date.

Davis, Herbert W. Clinical instructor in obstetrics, 1895-96.

Davis, Cushman K., St. Paul. Governor of the State and ex-officio regent 1874-75. Appointed regent 1883 and re-appointed three times serving until January 1898. Lecturer on International law 1895-00. Born in Henderson, N. Y., in 1838. Graduated from Michigan University in 1857. Served during the Civil War. Came to Minnesota in 1864. Appointed U. S. District Attorney in 1868, Governor of Minnesota in 1874. Elected to the U. S. Senate in 1887, re-elected so that he served continuously to date of his death, November 27, 1900.

Davis, F. C., assistant in surgery, 1899-01.

Davis, William Stearns, born April 30, 1877, Amherst, Mass.; son of William Vail Wilson and Rebecca Frances Stearns Davis; m. Alice Williams Redfield; professor of ancient history 1909 to date; A. B. Harvard '00; A. M. '01, Ph. D., '05, Harvard; lecturer at Radcliffe College '04-'05; instructor Beloit, Wis., '06-'07; associate professor of medieval and modern European history, Oberlin '07-'09; professor of history since 1909; research work in "The influence of wealth in imperial Rome;" has published same, and "Readings in Ancient history," two vols., '12-'13, "An outline history of the Roman Empire," '09; and

several historical novels; member Phi Beta Kappa, American historical association; Congregationalist.

Dawson, Charles A. Dispensary assistant, 1901 to date.

Dawson, Jennie, cataloger 1907 to 1910.

Day, Lester W. Assistant in medicine, 1901-04.

Dean of Women. This office was established by resolution of the board of regents at its December, 1906, meeting. The dean of women is to be the friend and adviser of every young woman in the University needing such help as a wise, cultured and sympathetic woman can give. Professor Ada Comstock was elected dean at the May, 1907, meeting of the board of regents. Dean Comstock resigned in 1912 and her place was filled by the election of Dr. Margaret Sweeney who entered upon her duties in the fall of the same year. The dean's office is in Alice Shevlin Hall.

Debate. Debate has always been a prominent feature of the work of the literary societies of the University. In the very beginning, when there were but the two literary societies, the Delta Sigma and the Hermean, these societies used to hold joint debates, sometimes as often as four times a year, while the weekly programs of the societies provided, almost always, for a debate.

The first intercollegiate debate was held May 26, 1893, with the University of Iowa, in Minneapolis. Several debates were held with Iowa and Wisconsin, without any formal organizations of any kind to back the Minnesota teams, which teams were composed of volunteers who were willing to devote what little time used to be devoted to the preparation for a debate. In 1896, the federated literary societies took up the subject and formed plans for the choosing of debaters to represent the University. This rather loose form of organization and supervision was kept up until 1898 when the University debating board was formed and plans made for sifting the material available for debate until the best material was secured to make up the teams to represent the University. See University Debating Board.

Debates with Chicago. Minnesota has met Chicago in debate three times, as members of the Central debating league.

DATE	OPPONENT	WINNER	MINNESOTA DEBATERS		
1893	Iowa	Iowa	A. M. Berseth	Thos. McElligott	W. A. Godward
1894	Iowa	Minn.	E. P. Caffrey	W. T. Coe	F. E. Green
	Wis.	Wis.	C. H. Fowler	C. E. Adams	W. W. Pendergast
1895	Wis.	Minn.	F. L. Anderson	B. L. Newkirk	Eliz. Beach
1896	Iowa	Iowa	E. F. McGinnis	L. T. Savage	G. S. Phelps
	Wis.	Wis.	A. H. Lee	J. B. Miner	E. A. Snow
1897	Iowa	Iowa	R. W. Nelson	Hubert Russell	W. D. Lane
	Wis.	Wis.	J. U. Hemmy	O. H. Christopherson	N. N. Bergheim
1898	Iowa	Iowa	S. O. Scott	W. B. Stewart	W. C. Hodson
1899	Chicago	Chicago	E. F. McGinnis	Arthur J. Finch	W. M. Jerome
	Iowa	Iowa	N. N. Bergheim	R. A. Lee	Eliz. Graham
1900	Iowa	Minn.	W. M. Jerome	J. B. Ormond	Jas. McIntyre
	N. W.	Minn	J. A. Burger	O. P. McElmeel	S. E. Moon
	Mich.	Mich.	J. A. Burger	O. P. McElmeel	H. B. Gislason
1901	Chicago	Minn.	H. J. McClearn	Benj. Drake Jr.	W. I. Norton
	Mich.	Mich.	O. A. Lende	A. L. Janes	Jas. McIntyre
	Iowa	Iowa	O. P. McElmeel	H. B. Gislason	P. J. Thompson
1902	Iowa	Minn.	O. A. Lende	O. P. McElmeel	A. L. Janes
	Wis.	Wis.	Jas. Kane	J. B. Ladd	R. C. Wedge
	Mich.	Minn.	H. J. McClearn	Benj. Drake Jr.	W. I. Norton
1903	Iowa	Iowa	I. A. Churchill	W. O. Williams	H. L. Wildey
	Wis.	Minn.	H. J. McClearn	Benj. Drake Jr.	R. P. Chase
	N. W.	N. W.	R. P. Chase	D. L. Grannis	E. C. Lundeen
1904	Iowa	Minn.	R. P. Chase	I. W. Choate	J. P. Devaney
	Mich.	Mich.	I. A. Churchill	Philip Carlson	J. G. Steenson
1905	Chicago	Chicago	G. Loevinger	J. P. Devaney	E. C. O'Brien
	Iowa	TIE	R. P. Chase	J. G. Steenson	Bernard Robinson
1906	Iowa	Minn.	J. P. Devaney	E. A. Robinson	Gustavus Loevinger
	N. W.	N. W.	S. B. Houck	Thee. Christianson	C. R. Thompson
1907	Wis.	Wis.	A. G. Evans	A. D. Colburn	M. J. Doherty
	Ill.	Minn.	J. P. Devaney	S. B. Houck	C. R. Thompson
	Neb.	Minn.	H. J. Deering	A. O. Colburn	S. B. Houck
	Iowa	Minn.	Zenas L. Potter	M. J. Doherty	A. G. Evans
1908	Iowa	Iowa	Zenas L. Potter	J. F. Sinclair	Max Lowenthal
	Ill.	Ill.	Chas. Carlson	Norman Houck	John McKinnon
1909	Wis.	Minn.	Chas. Carlson	Lambert Prigge	S. H. Peterson
	Neb.	Minn.	Fred Johnson	Chas. Rodeen	Norman Houck
1910	Ill.	Ill.	H. W. Borst	E. Bauers	T. Thomson
	Iowa	Iowa	H. A. Paddock	M. N. Olson	S. S. Gillam
1911	Wis.	Minn.	Theo. Thomson	Edgar Zelle	Eloi Bauers
	Neb.	Minn.	Stanley Gillam	Theodore Utne	M. N. Olson
1912	Ill.	Minn.	H. J. Burgstahler	O. B. Anderson	Raymond Ziesemer
	Iowa	Minn.	V. E. Stenerson	Wm. W. Hodson	Donald L. Pomeroy

January 14, 1899, Minnesota, represented by E. F. McGinnis, A. J. Finch, and W. M. Jerome, was defeated, at Chicago, while upholding the affirmative of the question, "Resolved, That United States senators should be elected by direct vote of the people."

January 10, 1901, Minnesota won from Chicago, while upholding the negative of the question, "Resolved, That the action of the United States in granting the franchise to the negro was hasty and ill advised." The debate was held at Minneapolis and Minnesota was represented by Hugh J. McClearn, B. F. Drake, Jr., and W. I. Norton.

January 21, 1905, Minnesota lost to Chicago, at Chicago. Minnesota was represented by G. Loevinger, J. P. Devaney, and E. C. O'Brien, who upheld the negative of the question, "Resolved, That the United States should continue its present policy of opposing the combination of railroads."

Debates with Illinois. The University has held but one debate with Illinois, that of April 5, 1907, this being the first debate in the new series planned by the Debating Circuit of America. Minnesota upheld the affirmative of the question, "Resolved, That the cities of the United States should seek the solution of their street railway problem through private ownership." The debate was held in the House chamber of the Capitol building, St. Paul, and Minnesota was represented by John P. Devaney, Stanley B. Houck, and C. Richard Thompson, and won the decision by two to one.

Debates with Illinois were held in 1908, 1910 and 1912. See under Central Debating Circuit of America.

Debates with Iowa. The University has held thirteen annual debates with representatives of the State University of Iowa. The first was held in 1893, May 26, at Minneapolis. The question debated was "Resolved, That the United States government should own and operate the telegraph system." In this debate Minnesota was represented by A. M. Berseth, Thomas McElligott, and William A. Godward and had the affirmative. Iowa won.

In 1894, Minnesota upheld the affirmative of the question, "Resolved, That international bimetallism is correct in theory and can be applied in practice." Minnesota held the affirmative and was represented by E. P. McCaffrey, W. T. Coe, and F. E. Green. The debate was held at Iowa City and Minnesota won.

In 1895 there was no debate held. May 15, 1896, Minnesota was represented by E. F. McGinnis, L. T. Savage, and G. Sidney Phelps. The debate was held in Minneapolis and Minnesota had the affirmative of the question, "Resolved that it would be desirable for American cities of 5000 or more inhabitants to organize and administer their own local government, subject only to the constitution of the state; and that the legislative powers of the state should not be exercised in such a way as to interfere with the plain and obvious purpose of the measure." Iowa won.

May 17th, 1897, the debate was held at Iowa City and Minnesota's representatives were R. W. Nelson, Hubert Russell, and W. D. Lane, who stood for the affirmative of the question, "Should the United States senators be chosen by direct vote of the people?" Iowa won.

View of Milling District from Campus

May 13th, 1898, the debate was held at Minneapolis and Minnesota was represented by S. C. Scott, W. B. Stewart, and W. C. Hodgson. Minnesota stood against the proposition, "Resolved, That the United States should regularly raise a part of her revenue by a graduated income tax, the constitutionality of which shall not enter into the discussion." Iowa won by a vote of 2 to 1.

May 11, 1899, Minnesota was represented by N. N. Bergheim, R. A. Lee, and Elizabeth Graham, who stood for the affirmative of the question, "Resolved, That the United States should continue the policy of territorial expansion." Iowa won by a vote of 2 to 1.

In May, 1900, Minnesota supported the negative of the question, "Resolved, That all disputes between organized labor and organized capital should be settled by compulsory arbitration." Minnesota was represented by W. M. Jerome, J. B. Ormond,

James McIntyre, with J. P. Smith, as alternate. This team won a unanimous decision. The debate was held in chapel.

March 8th, 1901, at Iowa City, Minnesota was represented by Owen P. McElmeel, H. B. Gislason, and P. J. Thompson. The question was, "Resolved, That it is unwise for the state to tax personal property," and Minnesota stood for the resolution. Iowa won.

March 27th, 1902, Minnesota supported the affirmative of the question, "Resolved, That the United States should permanently retain possession of the Philippines." Minnesota was represented by O. A. Lende, O. P. McElmeel, and A. L. Janes. The debate was held at Minneapolis and Minnesota won.

April 24th, 1903, Minnesota upheld the affirmative of the question, "Resolved, That the adjudication of disputes between employers and employees should be made a part of the administration of justice—granted, that special courts with appropriate rules of procedure may be established if desirable, and granted, that labor unions may be required to incorporate, if necessary." The debate was held at Iowa City and Minnesota was represented by I. A. Churchill, W. O. Williams, and H. L. Wildey. Iowa won.

February 26th, 1904, the debate was held at Minneapolis and Minnesota was represented by R. P. Chase, I. W. Choate, John P. Devaney, winning the debate while upholding the affirmative of the question, "Resolved, That the United States should now permanently abandon the protective policy."

March 3d, 1905, Minnesota was represented at Iowa City, by R. P. Chase, Jesse G. Steenson, Bernard Robinson. The decision was a tie. Minnesota had the affirmative of the debate upon the question, "Resolved, That freight rates in the United States should be fixed by government authority, constitutionality not to be considered."

February 23d, 1906, Minnesota upheld the negative of the question, "Resolved, That the United States should establish a fiscal protectorate over any West Indian, Central or South American Republic that shall manifest a chronic failure to meet its foreign financial obligations. Granted: that neither these republics nor any other nation would object," and was represented by J. P. Devaney, E. A. Robinson, Gustavus Loevinger. Minnesota won.

April 5th, 1907, at Iowa City, Minnesota upheld the negative of the question, "Resolved, That the cities of the United States should seek the solution of the street railway problem through private ownership," and won the unanimous decision of the judges. Minnesota was represented by Algernon Colburn, Michael Doherty, and Albert G. Evans. This was the first time Minnesota met Iowa as a member of the new debating circuit.

Debates with Iowa were held in 1908, 1910 and 1912. See Central Debating Circuit of America.

Debates with Michigan. The University has held four debates with Michigan, as members of the Central debating league. April 6th, 1900, Minnesota had the negative of the question, "Resolved, That the economic advantages of trusts are sufficient to justify their existence under the law." This debate was held at Chicago and Michigan won. Minnesota was represented by J. A. Burger, O. P. McElmeel, and H. B. Gislason.

January 11, 1901, the debate was held at Ann Arbor and Michigan won. Minnesota supported the negative of the question, "Resolved, That it is unwise for the state to attempt to tax personal property," and was represented by O. A. Lende, A. L. Janes, and James McIntyre.

April 4, 1902, at Chicago, Minnesota won over Michigan, opposing the permanent retention of the Philippines. Minnesota was represented by Hugh J. McClearn, Benjamin Drake, Jr., and Willis I. Norton.

January 16th, 1904, Minnesota upheld the negative of the question, "Resolved, That the adjudication of disputes between employers and employees should be made a part of the administration of justice—granted, that special courts with appropriate rules of procedure may be established if desirable, and granted, that labor unions may be required to incorporate, if necessary." Minnesota was represented by I. A. Churchill, Philip Carlson, and Jesse G. Steenson. The debate was held in Minneapolis and Michigan won.

Debates with Nebraska. December 13, 1907, Minnesota, represented by Harold Deering, Algernon Colburn and Stanley B. Houck, met the team representing Nebraska in the University chapel and won while unholding the affirmative of the question, "Resolved, That the federal government should have exclusive control of all corporations doing an interstate business." The vote was two to one for the affirmative.

Debates with Nebraska were held in 1909 and 1911. See Central Debating Circuit of America.

Debates with Northwestern University. Minnesota has met Northwestern University in debate three times, as members of the Central debating league. January 12th, 1900, in a debate held in Minneapolis, Minnesota upheld the negative of the question, "Resolved, That the Gothenburg system, modified, of controlling the liquor traffic offers the best solution of the liquor problem in this country, modification to be the inclusion of malt liquors and government ownership by each state," and won the debate. Minnesota was represented by J. A. Burger, O. P. McElmeel, and S. E. Moon, W. W. Massee was alternate.

January 16, 1903, at Chicago, Minnesota upheld the affirmative of the question, "Resolved, That the importation of Chi-

nese laborers into our insular possessions should be prohibited," and lost the debate. Minnesota was represented by R. P. Chase, D. L. Grannis, E. C. Lundeen.

January 19th, 1906, at Minneapolis, Northwestern won. Minnesota was represented by Theodore Christianson, C. R. Thompson, and S. B. Houck, upholding the affirmative of the question, "Resolved, That the United States should establish a fiscal protectorate over any West Indian, Central or South American Republic whenever it shall manifest a chronic failure to meet its foreign financial obligations, granted that neither these republics nor any other foreign nation would object."

Debates with Wisconsin. Minnesota has met Wisconsin seven times in debates. April 20th, 1894, at Madison, Minnesota had the negative of the question, "Resolved, That the complete exclusion of foreign immigration for a period of ten years would be preferable to a continuation of the present freedom of immigration for the same period. Minnesota was represented by Carl Fowler, Charles E. Adams, and Warren W. Pendergast. Wisconsin won by a vote of 2 to 1.

May 24th, 1895, Minnesota won the debate held at Minneapolis. Minnesota was represented by F. L. Anderson, B. L. Newkirk, and Elizabeth Beach, who upheld the negative of the question, "Resolved, That United States senators should be elected by direct vote of the people."

April, 14th, 1896, at Minneapolis, Minnesota was represented by A. H. Lee, J. B. Miner, and E. A. Snow, who upheld the affirmative of the question, "Would it be sound policy for congress to legalize contracts for the division of competitive freight earnings of railroad companies engaged in inter-state commerce; provided, that all such pooling contracts shall be filed with the interstate commerce commission, which shall have power to abrogate such contracts whenever, in the opinion of such commission, said contracts are detrimental to public policy." Wisconsin won.

April 30th, 1897, at Minneapolis, Minnesota was represented by J. U. Hemmy, C. H. Christopherson, N. N. Bergheim, who upheld the negative of the question, "Resolved, That a system of municipal government concentrating all executive and administrative powers in the mayor should be adopted in cities of the United States of over 40,000 inhabitants. Executive and administrative powers shall be interpreted to include the sole power to appoint and remove all heads of departments and city officers (except the treasurer and comptroller—the comptroller to have only the powers of an accounting officer). All subordinates shall be appointed by the heads of their respective departments, under civil service rules, and may be removed for reasons other than political. The mayor, the heads of departments, and the city officers in their respective capacities shall have power to make all contracts, to purchase all material and supplies, to have charge of the construction, improvement, extension, and management of all public streets, works and property; to grant all licenses and franchises subject to the confirmation of the common council; to make all estimates for the following fiscal year, said estimates not to be increased by the council." Wisconsin won.

Folwell Hall and Physics Building

May 1st, 1902, Minnesota had the affirmative of the question, "Resolved, That railroad rates should be fixed by governmental authority," Minnesota representatives were James Kane, J. B. Ladd, and R. C. Wedge. The debate was held at Wisconsin and that university won.

May 8th, 1903, at Minneapolis, Minnesota was represented by H. J. McClearn, Benjamin Drake, Jr., and R. P. Chase, and won the debate while upholding the affirmative of the question, "Would the relinquishment by the federal government of its rights to tax inheritances to the states exclusively, be preferable to the relinquishment by the states of their rights to tax inheritances to the federal government? It being mutually conceded: (1) that all rights of taxation of inheritances now possessed by the states or by the federal government can and will be transferred by either to the other, (2) That the federal government stands in need of revenue, and that the federal tax can become a law."

December 13th, 1907, the University, represented by Albert G. Evans, Zenas L. Potter and Michael J. Doherty, met the team representing Wisconsin, at Madison, Wis., and lost the debate, by a vote of two to one. Minnesota defended the negative of the proposition, "Resolved, That the federal government should have exclusive control of all corporations doing an interstate business."

Debates with Wisconsin -were held in 1909 and 1911. See Central Debating Circuit of America.

Debate—Central Debating Circuit of America, The. In 1906, the universities of Minnesota, Wisconsin, Iowa, Illinois and Nebraska organized a debating league, the constitution of which provides that each university shall have two teams, one on the affirmative and one on the negative of the question which is to be the same for all the Universities in the league. The affirmative is always supported by the home team and the negative by the visiting team. On April 5th, 1907, Minnesota debated with Illinois at St. Paul, and Iowa at Iowa City. In December, 1907, Minnesota met Wisconsin at Madison and Nebraska at Minneapolis, in 1909 Illinois at Champaign and Iowa at Minneapolis; in 1910, Wisconsin at Minneapolis and Nebraska at Lincoln.

The result of the first series of debates was that Minnesota won from both her opponents, Iowa at Iowa City and Illinois in the House of Representatives, St. Paul. Wisconsin likewise won both her debates. Iowa and Nebaska lost both debates, while Illinois won one and lost one. The question discussed was "Resolved, That the cities of the United States should seek the solution of the street railway problem through private ownership."

The result of the second debate, held December 13th, 1907, was that the affirmative won in every case, each college in the league winning one and losing one. The question argued was, "Resolved, That the Federal government should have absolute control of all corporations doing an interstate business, constitutionality granted."

In 1908 Minnesota lost both debates, to Iowa at Minneapolis and to Illinois at Urbana. The question discussed was, "Resolved, That American cities should adopt the commission form of government." The team which met Iowa included Max Lowenthal, John F. Sinclair and Zenas Potter; The team which met Illinois was made up as follows: Charles Carlson, Norman Houck and John McKinnon.

In 1909 Minnesota won both debates. The question discussed was, "Resolved, That a graduate income tax exempting incomes of $5,000 or less would be a desirable feature of the federal taxation system. Sigurd H. Peterson, C. E. Carlson and Lambert Prigge met Wisconsin in the University chapel and Charles Rodeen, Norman Houck and Fred Johnson met Nebraska at Lincoln.

In 1910 Minnesota again lost both debates, to Iowa at Iowa City and to Illinois in Minneapolis. The question discussed was, "Resolved, That the movement of organized labor for the closed shop should receive the support of public opinion." Homer Borst, Eloi Bauers and Theodore Thompson went against Illinois and Stanley Gillam, R. N. Olson and Henry Paddock met the Iowa team.

The 1911 teams were both successful in handling the question, "Resolved, That the United States should adopt a policy of shipping subsidies." Theodore Thompson, Edgar Zelle and Eloi Bauers met Wisconsin at Madison and Stanley Gillam, Theodore Utne and Matthias N. Olson met Nebraska in the University chapel.

Again in 1912 Minnesota won both debates, Illinois was defeated at home by Henry J. Burgstahler, O. B. Anderson and Raymond Ziesmer, while Iowa was defeated in Minneapolis by Vernon E. Stenerson, William W. Hodson and Donald L. Pomeroy. The question discussed was, "Resolved, That all corporations engaged in interstate commerce should be required to take out a federal charter, constitutionality granted; provided that federal license shall not be available as an alternative plan."

Decker, Calvin D., born August 18, 1858, Austin, Minn. B. S., Carleton college, 1886. Teacher, purchasing agent and secretary of the board of regents of the University of Minnesota, 1905 to 1911.

Decker, Wilbur F., instructor in shop work, drawing and physics, 1881-1885.

Degrees. See next page

Deinard, Samuel N., born January 25, 1872, Rossieny, Russia. Educated at Elder von Lamel Schule, Jerusalem, Palestine; Teachers' Normal School, Cologne on the Rhine, Germany; B. A. De Puaw University, 1897; M. A., University of Chicago, 1901; Ph. D., University of Minnesota, 1905. Preacher; teacher, evening and religious schools; instructor, University of Minnesota, Semitic language and literature, 1902-04; assistant professor, 1904 to 1912; instructor in semetics, 1912-13. Author of The New Year's Day and Day of Judgment of the Jewish calendar; Contributions to the Journal of Semitic Languages and Literatures and other periodicals.

De La Barre, William, assistant in nose and throat diseases, 1895-96.

Delamare, Rene M., instructor in French 1909 to date.

Delta Chi. Established at Minnesota in 1892. Founded at Cornell in 1890.

Delta Gamma. Lambda chapter established in 1882. Founded at Warren Female Institute in 1872.

Delta Delta Delta. Theta chapter established in 1894. Founded at Boston in 1889.

Delta Kappa Epsilon. Phi Epsilon chapter established in 1889. Founded at Yale, 1844.

DEGREES--Including those who received degrees on commencement day 1913, the University has conferred 10,379 degrees upon 9,389 persons--6,809 men and 2,580 women, as follows:

	Men	Women	Total
College of Science, Literature and the arts--			
Bachelor of Arts	1053	1700	2753
Master of Arts	177	136	313
Bachelor of Science	536	158	694
Master of Science	84	11	95
Bachelor of Literature	132	331	463
Master of Literature	10	11	21
Bachelor of Philosophy	4	6	10
Doctor of Philosophy	47	5	52
Doctor of Science	1	0	1
College of Engineering and the Mechanic Arts--			
Bachelor of Science	1	0	1
Bachelor of Civil Engineering	48	0	48
Civil Engineer	218	0	218
Bachelor of Mechanical Engineering	22	0	22
Mechanical Engineer	152	0	152
Bachelor of Electrical Engineering	23	0	23
Electrical Engineer	256	0	256
Bachelor of Architecture	5	0	5
Bachelor of Science (in Engineering)	100	0	100
School of Chemistry--			
Chemical Engineer	8	0	8
Bachelor of Science (in Chemistry)	63	4	67
Bachelor of Science (in Chemical engineer.)	10	0	10
Analytical Chemist	8	0	8
Bachelor of Science	8	0	8
School of Mines--			
Bachelor of Mining Engineering	6	0	6
Mining Engineer	10	0	10
Engineer of Mines	196	0	196
Metallurgical Engineer	4	0	4
College of Agriculture--			
Bachelor of Agriculture	31	0	31
Bachelor of Science (in Agriculture)	87	0	87
Bachelor of Science (in Home Economics)	0	62	62
Bachelor of Science (in Forestry)	59	0	59
Master of Forestry	2	0	2
Master of Industrial Pedagogics	0	0	0
Master of Agriculture	3	0	3
Master of Science in Agriculture	3	0	3
College of Law--			
Bachelor of Laws	1955	23	1978
Master of Laws	202	8	210
Doctor of Civil Law	3	0	3
Department of Medicine--			
Hamline--certificate	9	0	9
Bachelor of Medicine	8	1	9
Doctor of Medicine	1002	58	1060
Doctor of Medicine (Homeopathic)	78	15	93
Graduate in Nursing	0	12	12
Doctor of Dental Surgery	512	3	515
Doctor of Dental Medicine	208	4	210
Bachelor of Pharmacy	106	13	119
Doctor of Pharmacy	69	6	75
Pharmaceutical Chemist	107	15	122
Master of Pharmacy	2	0	2
College of Education	39	131	170
Total Degrees Granted	7668	2713	10379

Delta Phi Delta. Gamma chapter established in 1902. Law fraternity.

Delta Sigma. The first literary society organized at the University. Organized November 22, 1867. The purpose of this society was the promotion of general culture and training in debate, oratory and literary work of various kinds and the promotion of a spirit of goodfellowship among its members. This society was disbanded in——.

Delta Sigma Delta. Dental fraternity. Theta chapter established in 1892. Founded at Michigan in 1882.

Delta Sigma Rho, The. See Forensic Honor League.

Delta Tau Delta. The third fraternity to be established at the University. Beta Eta chapter established in 1883. Founded at Bethany College in 1859.

Delta Upsilon. Mu chapter established in 1890. Founded at Williams College, 1834.

Delta Wye. An organization of upper classmen pursuing courses in civil engineering.

Demonstration Farms. The plans of supervising farms in various parts of the State with the idea of demonstrating methods of practical value to that part of the State, was started in 1910. About 25 demonstration farms are being operated at the present time under the direction of three men. Each farm is visited at least twice each month and public demonstrations are given at convenient seasons. The work of the farm is done under the direction of the visiting supervisor and careful record is kept of all operations, expenses, etc. These farms are always open to public inspection and at stated times the general public is invited to visit the farms. An adidtional feature in this work has been the maintenance of small demonstration plots in co-operation with several farmers in various communities. This phase of the work is confined to the demonstration of specific problems such as the growing of alfalfa, or the killing of quack grass, or seed improvement, etc.

Demonstration farms chart. See Minnesota Alumni Weekly June 10, 1912.

Dennis, Warren A., assistant in surgery, 1899-1903; clinical instructor in surgery, 1903 to 1909; clinical professor to 1913; assistant professor 1913—.

Dennison, Laura M., instructor in drawing, 1893-94.

Denny, Grace Ella, instructor in physical training, department of agriculture, 1911 to date.

Dentistry Building (formerly Medical Science). This building was completed in 1896 at an initial cost of $40,000, an addition was made in 1898 and the building was remodeled in 1912, at an additional cost of $20,000; it represents a value of about $90,000, at the present time. It is constructed of light brick and covers 75x150 feet and is four stories high. Originally the building was occupied by the medical sciences requiring the use of considerable laboratory space, not including chemistry; the building also housed the college of pharmacy in the south wing. The building is well arranged and well lighted for laboratory work. The legislature of 1911 appropriated $20,000 to remodel this building for the use of the college of dentistry. The fire in Millard hall hastened the work of remodeling and the college of dentistry took possession of the building in the fall of 1912, the college of pharmacy still using, temporarily, a portion of the south wing. With the opening of the year 1913-14, the college of dentistry is in exclusive possession of the building which is wonderfully well suited to its use.

Dentistry, The College of. In 1883, the board of directors of the old Minnesota Hospital College, backed by the newly organized state dental association organized a course in dentistry of two years of five months each. This course was pursued in common with medical students and the clinical work required for a diploma was the treatment of two or more patients, one

plate, one thesis on an original subject and one mechanical specimen to be deposited in the museum.

When the college of medicine and surgery was re-orgainzed in 1888 and the department of medicine was established as a teaching instead of an examining institution, provison was made for the establishment of the college of dentistry and a faculty was appointed with Dr. Charles M. Bailey, as secretary, Dr. Millard being dean of the department. The work of the college was carried along for four years, in the old building at the corner of ninth avenue south and sixth street, since occupied by Asbury Hospital, and in 1892, the college came to the campus, with other colleges of the department and a re-organization took place which gave the college larger freedom in the management of its own affairs, and Dr. W. Xavier Sudduth was elected dean,, which office he held until 1895, when he was succeeded by Dr. Thomas E. Weeks, who was dean until 1897. The deanship was dropped for a time and Dr. William E. Dickinson was made secretary, afterward, in 1899 being made acting dean; in 1900 he was made dean, continuing in that office until 1905, when Dr. Alfred Owre, of the class of 1894, was made dean, being the first alumnus of the University to be appointed to that office.

The college was housed in Millard hall on the main campus from 1892 down to March 1st, 1912, when Millard hall was destroyed by fire. It was accommodated for the balance of that year in the Laboratory of Experimental Engineering and later was removed to the Medical Science Building on Pleasant Street. During the year 1912-13 it occupied the major portion of this building, the college of Pharmacy retaining the rooms previously used by that department for the year. With the opening of the year 1913-14 the college occupies the whole of the building formerly used by the laboratories of medical sciences. The building has been thoroughly remodeled for the use of the department and furnishes suitable and pleasant quarters for the college.

This college course has always been a minimum of three years and the entrance requirement has been raised, at various times, so that now a full high school course is required, together with the demonstration of mechanical ability. In 1904 it was decided to make the course a four year course, and announcement was made of the plan. However, the plan was never put into operation and no class has ever been required to complete four years work for a diploma though students are strongly advised to pursue a year's preliminary work in the college of science, literature and the arts.

The work of the first year is quite similar to the work of the college of medicine and surgery, the same subjects are pursued but less time is devoted to the same and the time so saved is devoted to subjects directly bearing upon the practice of dentistry. The work of the second and third years is devoted exclusively to subjects directly bearing upon dentistry. The tuition required in this college is a level fee of $150 a year. The degree granted is that of doctor of dental surgery, though from 1893 to 1902, inclusive, the degree granted by this college was that of doctor of dental medicine. The college is a member of Dental Faculties Association of American Universities and its diploma is recognized by the dental examining boards of every state in the union. The faculty includes in addition to 27 members of other faculties who give instruction to students in this college, 6 professors, 9 assistant professors, 4 associate professors, 9 instructors and assistants who give instruction in dental subjects only. Three nurses are on duty in the infirmary at all times. The enrollment for 1912-13 was 254. The college year is co-incident with that of other departments of the University. The college has granted 715 degrees, 708 to men and 7 to women. 509 of these degrees were doctor of dental surgery and 206 doctor of dental medicine.

Denton, Frederick W., associate professor of mining, 1895-96; professor of mining, 1896-98. Native of New Jersey. Early education at Charleston, S. C., including part of his college work. Columbia School of Mines, 1889. Fellow in engineering, Columbia, 1889-90. In charge of departments of civil and mining engineering, Michigan, 1890-92. Professor in same position, 1892-94. Mining engineer, Minnesota Mining Company, 1894-96.

Departmental Societies. In a large number of departments of the University students and faculty members unite to form a club for the purpose of reading, discussing and listening to reports upon current literature of special interest to the department. These organizations are usually in the form of journal clubs.

Derby, Ira H. Instructor in medical chemistry, 1903-1906; demonstrator in same, 1906-07; assistant professor same, 1907 to date. B. S., Harvard '99; Ph. D., Chicago '10.

Derickson, Maud E., loans and serials, University library, 1909-1913.

Desmarais, Homer Alexander, scholar in French, 1911 to 1912; assistant in French to date.

Detwiler, Samuel Bertolet, born September 18, 1881, Phoenixville, Pa. Educated, Yale Forestry School; B. S., in Forestry University of Minnesota. Five years experience in work of U. S. Forest service; assistant professor in forestry, University of Minnesota, 1907-08.

Dewey, John. Professor of mental and moral philosophy and logic, 1887-89. Now professor in the University of Chicago. B. A. '79, University of Vermont; Ph. D. '84; Johns Hopkins; Phi Beta Kappa.

Dibell, Homer B., professorial lecturer in law 1913-.

Dickinson, William P. Professor of operative dentistry and dental therapeutics, 1891-92; professor of therapeutics and crown and bridge work, 1892-94; professor of therapeutics and clinical professor of operative dentistry, 1894-97; also secretary, 1897-98; also acting dean, 1898-99; professor of materia medica and dean, 1899-1904; professor of materia medica, 1904-05.

Dietrich, Wm. Animal husbandman, Crookstson school of agriculture, 1913.

Dietrichson, Gerhard, born in 1883, Nicedah, Wis.; instructor in Chemistry since 1913; B. A., Minn., '08; B. S. Chemistry, same, '09; Ph. D., Wisconsin, '13; graduate student, Wisconsin, 1909-13.

Dight, Charles Fremont, born July 6, 1856, Mercer, Pa.; Scotch German ancestry; instructor in pharmacology 1908-09; lecturer in pharmacology and materia medica 1909 to 1913; M. D. Michigan '79; began teaching in the University of Michigan in 1881; in 1883 attained title of professor; for 32 years has been engaged in teaching; research work, on borax and boric acid as food preservatives, skulls of the 6th and 7th centuries, on the Bilharzia Haematobium of Egypt, thermal inspirator; has published papers upon physical and chemical forces in vital operations, sanitary progress, the human body a co-operative commonwealth, science, and on various subjects connected with his research work; health officer of Holton, Mich. for two years connected with private practice; served in the Willis eye hospital of Philadelphia, Pa.

Dining Hall. This building was erected in 1895 at an original cost of $42,500. It was remodeled in 1906 at a cost of $10,000 and later remodeled at an additional cost

of $26,000. It represents an investment of $78,500. It is built of Milwaukee cream colored brick and is three stories high. It contains kitchens, dining rooms and dormitories.

Dinwoodie, Dr. J. T. E. Instructor in veterinary medicine, 1913.

Disen, C. F., demonstrator in anatomy 1908 to 1912.

Dixon, Harry W. Engineer, 1890 to date.

Dodge, James Albert, professor of chemistry 1880-93. See first edition.

Donaldson, Aris B. Professor of rhetoric and English literature from 1869 to 1874. Deceased. Member of the first University faculty.

Donaldson, Ronald S., Farmington. Appointed regent 1869, re-appointed 1869, served to end of 1871.

Donaldson, Zoe, scholar in rhetoric 1911-12.

Donnelly, Ignatius, Ninninger. Regent ex-officio, as lieutenant-governor, February 14, 1860-March 3, 1863.

Donovan, Ray L. Assistant in demonstration farm work, 1913.

Dormitories. The policy of the University has been not to provide dormitories for students, save for those attending the schools of agriculture, where conditions have made such a policy almost imperative. A departure from this policy was made when Sanford Hall, a dormitory accommodating ninety women was erected upon the University campus in 1910.

Dorr Drinking Fountain, The. This fountain was erected in 1902 by Caleb D. Dorr, of Minneapolis. It is a graceful shaft of granite mounted on a suitable

pedestal of the same stone, designed by Ernest Kennedy, Ex-'88. It is located at the intersection of the driveway nearest the physics building and about equally distant from that building and the chemistry building.

Downey, Hal, born October 4, 1877, State College, Pa.; American ancestry; m. Iva Clare Mitchell; one daughter; with the U. S. A. in the Philippines, 1898-99; scholar animal biology 1901-03; assistant, 1903-04; instructor, 1904-08; assistant professor, 1907 to 1913; associate professor to date; B. A. '03; M. A. '04; Ph. D. '09; Berlin, '10; Strassburg, '11; American editor of the Folia Haematologica; research work in blood and blood-forming organs of man and lower vertebrates; cellular elements of the connective tissues;

attachment of muscles; publications, Lymphatic tissue of polyodon, phagocytosis, origin of plasma cells, origin of mast cells, development of lymphocytes in lymph nodes and spleen, attachment of muscles in crayfish, the origin of blood platelets, development of histogenous mast cells in guinea pig and cat; member, Minn. Pathological Soc., Amer. Association of Anatomists, Anatomische Gesellschaft, Sigma Xi.

Downey, John Florin, born January 10, 1846, at Hiramsburg, Ohio; son of Thomas and Mary Ann Scott Downey, both of Scotch-Irish descent; m. Margaret Elsie Downey; two sons; professor of mathematics and astronomy and head of department, 1880-94; professor and head of department of mathematics, 1894 to date; dean of the college of science, literature and the arts, 1903 to date; B. S., Hillsdale, 1870; M. S., same, 1873; M. A., same, '77; graduate work at Michigan, 1871-72; C. E., State college Pa., 1877; graduate work at Edinburgh and Gottingen, 1901-02; instructor in Hillsdale, 1870-71; principal of schools, Cassopolis, Mich., 1871-72; professor of mathematics, State College, Pa., 1873-80; enlisted as drummer boy in the Eleventh Michigan Infantry; served as "pioneer" on the Atlantic Campaign and was in the battles of Buzzard-Roost Gap, Resaca, Dallas, Allatoona, Kennesaw Mountains, Smyrna Camp, Peachtree Creek, and Atlanta; before the close of the campaign was made Principal Musician with the rank of Seargent Major, in field band of twenty-two men; author of Higher Algebra; Elements of Differentiation and Integration. Lecturer on scientific, educational, and popular subjects; member of the Mathematical society; G. A. R.; Phi Beta Kappa association of State University deans; A. A. A. S.; Methodist.

Dragon, The. An organization of men of the freshman class (1907) for the purpose of promoting good-fellowship.

Drake, Charles R., demonstrator in pathology and bacteriology 1911-12; assistant in internal medicine.

Dramatic Club, The. An organization of students of the University who are interested in dramatic affairs and who have demonstrated dramatic ability. This organization gives one, or more, plays annually, usually in some down-town theatre. The club has also taken short trips out into some of the larger cities of the state for the purpose of presenting plays which have been put on at home. Organized February 21, 1896. There seems to have been some sort of a dramatic organization in existence, as far back as the spring of 1892, but it is impossible to learn definitely about its doings. A play entitled "A Box of Monkeys" was given in chapel in the spring of 1892, and it was at this play that a fire was started which destroyed the top floor of the old main. No record can be found of anything between this date and the following:

In 1896, soon after the organization of the club, David Garrick was given under the direction of Professors McDermott and McClumpha. The next spring, under the direction of the same professors, The Rivals was put on.

1897-98—Play presented in the Armory, February 22, "Our Boys."

1898-99—"Twelfth Night" was given.

1899-00—Play presented at the Lyceum, February 26, 1900, "The School for Scandal." Under direction of Clayton D. Gilbert.

1900-01—Plays given at the Lyceum Theatre, February 11, 1901, were "A Woman's Won't," "At the Barricade," and "A Flower of Yeddo."

1901-02—Plays presented at the Lyceum Theatre, February 10, 1902, "The Old Musician" and "The Romanesques."

1902-03—Play given was "One Summer's Day," at the Lyceum Theatre, February 23, St. Cloud, February 26, Fergus Falls, February 27, Moorhead, February 28, Mankato, April 17, and Faribault, April 18, 1903.

1903-04—"One Night Only," was given February 3, at the East high school auditorium.

1904-05—Plays were given as follows: "A Pair of Spectacles," at the Lyceum Theatre, November 4, 1904. "The Pillars of Society." Under direction of Charles Mead Holt and Richard Burton.

1905-06—"Nance Oldfield" and "Cricket on the Hearth"—Unique Theatre, December 14, 1905; Faribault, February 22, 1906; Hastings, March 2, 1906. Under direction of Charles M. Holt and Samuel Andrews.

1906-07—The plays, "My Lord in Livery," "Her Picture," "A Man of Letters," were given by the club assisted by Dr. Richard Burton, at the Johnson School, November 8, 1906; "Tulu," was presented in Chapel, March 22, 1907; "Twelfth Night," given on the campus afternoon and evening of May —, and June 14, 1907, under direction of Mr. and Mrs. Charles Mead Holt.

1907-08—"Esmeralda" was given at Litchfield, Willmar, Benson, Granite Falls and Glencoe, during the holiday vacation. It was also given at the Holt School hall, on the evening of January 16, under the direction of Professor Charles M. Holt, and "As You Like It," coached by Mr. Holt and given at Fresco, May 29, 1908.

1908-09—"The Good Natured Man," coached by Professor Clure.

1909-10—"King Rene's Daughter," "You Never Can Tell" and "Comedy of Errors."

1910-11—"Trelawney of the Wells," coached by Mr. Holt and given at the Shubert.

1911-12—"The Merchant of Venice," "The Magistrate" and 'The Pretenders." The club gave a production of the "Merchant

of Venice" as part of the University week's programs.

1912-13—"Arms and the Man," and the "Watchers" by Enza Zeller. The University weeks play, given ten evenings, was "A Pair of Spectacles."

For a number of years this club was known as the Masquers.

Drew, James Meddick, born February 17, 1863, Rollingstone Valley, Minn. Graduate of the Winona Normal; two years Cornell course in agriculture; taught in the district school for a term. Instructor in School of Agriculture 1893-1910. Registrar of the school since 1903.

Drill Hall. This building was erected in 1893 at a cost of $30,000. It is built of red pressed brick and contains an armory which is also used as an auditorium and for the gymnasium. It has been variously used in times past for the department of

entomology, the veterinary department and for animal husbandry. It contains some class rooms and has also been utilized for work in carpentry and drawing. It is to be remodeled at a cost of $10,000 for the departments of botany and plant pathology.

Dryg, Annette E., stenographer, business office of department of agriculture, October, 1905 to 1910; secretary to the Dean, since 1910.

Duffy, H. T., clerk, purchasing department, 1913 to date.

Dunkel, Otto, instructor in mathematics, 1905-06.

Dunn, James H., professor of diseases of genito-urinary organs, 1888-04.

Dunnell, Mark H., Owatonna, superintendent of public instruction and ex-officio regent, 1868 to July 31, 1870.

Dunning, Arthur W., born February 12, 1860, Fond du Lac, Wis.; New England ancestry; m. Emma Holman, deceased 1910; two daughters; clinical professor nervous and mental diseases 1897 to 1913; M. D. College Phys. and Surg. Chicago '85; graduate work Johns Hopkins, '00; graduate work Harvard, '02; general practice 1885-00; special practice 1900 to present time; research work incident to specialty; has published some ten or a dozen papers on neurological subjects; interested in the promotion of public playgrounds in St. Paul, member Municipal com. for this work from 1904 to present time; member American, State and Ramsey Co. medical associations, Minn. Academy of medicine of which he was secretary for ten years, president of Minn. Neurological society at the present time; Methodist.

Dunsmoor, Frederick Alanson, born May 28, 1853, Minneapolis; Scotch-Irish ancestry; son of James A. and Almira Mosher Dunsmoor; m. Elizabeth E. B. Turner; two daughters; professor operative and clinical surgery 1888 to 1910; professor of clinical surgery to 1913; attended the sub-freshmen class in the University in 1870; M. D. Bellevue '75; engaged in practice of medicine since date of graduation; has done research work connected with regular practice in surgery, particularly with reference to omentum; has published monographs on medical subjects; county physician Hennepin county; member, Minneapolis, Lafayette, Minnetonka boat clubs, Nu Sigma Nu, the Hennepin Co., State, and American medical associations. Methodist.

Dunwoody Prize. In 1902, Mr. William H. Dunwoody, president of the St. Anthony and Dakota Elevator company, provided an annual prize of $100 to be used by the department of rhetoric for prizes in debate and oratory. The first year the whole amount was awarded to the man who represented Minnesota in the Northern Oratorical league contest. Afterward, the amount was divided and $75 were awarded annually to the team winning the intra-sophomore debate. $25 were combined with a like amount taken from the Peavey prize money and awarded to the winners of the Peavey-Dunwoody contest.

This prize has been awarded as follows: 1903, to M. H. Halloran, B. B. Heuston and Nellie Cashman; 1904, Paul Stratton, J. Z. Nebbergall and J. F. Sinclair; 1905, Messrs. Frye, Swenson and Randall; 1906, unable to determine facts; 1907, T. H. Uzzell, S. H. Peterson and Max Lowenthal; the offer of this prize was withdrawn in 1910.

Durand, Edward Dana, born October 18, 1871, at Romeo, Mich.; son of Cyrus Y. and Celia Day Durand; m. Mary Elizabeth Bennett; three sons and one daughter; professor of economics and director of bureau of statistics since 1913; A. B., Oberlin, '93; Ph. D., Cornell, '96; legisla-

tive librarian N. Y. state library 1895-97; assistant professor of administration and finance, Stanford University 1897-99; secretary U. S. industrial commission 1900-02; instructor in economics at Harvard 1902-05; special expert agent U. S. census office in street railways and electric light plants 1902; special examiner for the bureau of corporations 1903-07; deputy commissioner of corporations 1907-09; director U. S. census since June 1909-13; author of Finances of New York City 1898; numerous government reports and contributor on economic and political subjects to various magazines and journals; reports of industrial commissions; member, Am. Econ. Assn., Am. Polit. Science Assn., Am. Statis. Assn., Am. Assn. Labor Legislation, Council Am. Econ. League, Phi Beta Kappa; Congregationalist.

Durment, Edmund S., born March 19, 1860, in Brown county, Ind.; son of George W. and Henrietta A. Hoggatt Durment; m. Rose Smith; one daughter and two sons; special lecturer on rights of eminent domain, college of law, 1907 to date; LL. B., Columbian (now George Washington University) D. C., 1884; engaged in the practice of law in the state and federal courts in Minnesota and the United States circuit court of appeals and supreme courts, for the past twenty-eight years; one of the founders of the St. Paul College of Law and for several years lecturer in that school on the subject of common law and pleading and practice; has served as state senator in the legislature; member St. Paul Commercial club, Minnesota club, Ramsey county bar association, of which he was once president; Minnesota State Bar association; affiliated with the People's Church of St. Paul.

Dybevick, Ivare O., born April 21, 1872, Norway. Public schools of Norway and the United States. Two terms at the Minnesota Dairy School. Twelve years as practical butter maker and two years as dairy and food inspector. Instructor in dairy school 1906 to 1911.

Dye, John W., director of the gymnasium of the school of agriculture, 1903-04.

Eagles, The. Established in 1910. A co-educational literary organization of the school of agriculture.

Earnings of Students. See Expenses of students.

Eaton, Eleanor Grace, assistant in English 1912 to date.

Eberhart, Governor Adolph O., ex-officio member of the board of regents from 1909 to date. Succeeded to governorship on the death of Governor Johnson and has been twice re-elected to that office.

Eberly, Karl C., instructor in physiology, 1913-.

Ebersole, John Franklin, born in 1884, North Tonawanda, N. Y.; American parentage, remotely English and Swiss; m. Blanche Brenneman; one daughter; assistant professor, extension division, 1911-12; regular department of econ. and pol. sci., 1912 to date; Ph. B., Chicago '07, with honorable mention for general scholarship and special honors in political economy; A. M., Harvard, 1909; three years college and university teaching experience before coming to the University.

Eckerson, Charles H., instructor in mining, 1899-00. Born at Closter, New Jersey, 1877. Graduated from Drisler school, New York City as honor scholar in 1897. Took his degree of E. M. at Columbia University, 1898. Appointed University scholar in geology in 1898 and took special work in geology, palaeontology and metallurgy.

Eddy, Henry Turner, born June 9, 1844, Stoughton, Mass.; son of Rev. Henry Eddy, M. D., and Sarah Hayward Torry Eddy, a graduate of Mt. Holyoke and later instructor in mathematics in that institution; m. Sebella E. Taylor, 1870; one son, four daughters; B. A., Yale, 1867; Ph. B., Sheffield, 1868; A. M., Yale, 1870; Cornell, C. E., 1870; Ph. D., 1872; LL. D., Center College, 1892; Berlin 1879 and Paris 1880; instructor in field work, Sheffield 1867-68; instructor in Latin and mathematics, University of Tennessee, 1868-69; assistant professor of mathematics and engineering, Cornell, 1869-73; adjunct professor of mathematics, Princeton, 1873-74; professor of mathematics, astronomy and civil engineering, University of Cincinnati, 1874-90; dean of the academic faculty of same, 1874-77; and 1884-89; acting president and president-elect 1890; same; president of Rose Polytechnic Institute, Terre Haute, Ind., 1891-94; professor of engineering and mechanics, 1894-1912; dean of graduate school 1905-12; professor emeritus 1912 to date; member of American Philosophical society, American Association for the Advancement of science, vice-president for mathematics and physics 1884; American mathematical society, American physical society, Society for promotion of engineering education, president in 1896; Phi Beta Kappa, Sigma Xi; author of Analytical geometry (1874); researches in Graphical statics (1878); Thermodynamics (1879); Neue Konstructionen aus der graphischen statik, (1880); Maximum Stresses, under concentrated loads, (1890); and engaged on investigations into the laws of strength of concrete slabs and preparing same for publication; also papers in numerous scientific and technical journals.

Edgar, Caroline B., student assistant in operative clinic, 1892-93; D. M. D.—same title, 1893-95. Mrs. C. A. Erdmann.

Edgerton, A. J., Kasson, regent 1878, reappointed 1881 and immediately resigned.

Editor-in-Chief of the Gophers. A list of the editors-in-chief of all Gophers, to 1907, will be found on page 179 of the Gopher of 1907.

Edmunds, J. L., animal husbandry, 1909-10.

Education, The College of. The first work in education as a part of the regular college course was offered in 1885-86, when Professor Harry P. Judson, now President of the University of Chicago delivered a course of lectures, one hour a week, to seniors in the third term. This course was continued until 1892, when a teachers' course, of two years, was established, upon the completion of which a University teachers' certificate was granted. For one year Dr. David L. Kiehle, then superintendent of public instruction conducted the course, and in the following year was appointed professor in charge. The two-year course was discontinued in 1899, and from that time on the University teachers' certificate was granted to graduates of the college of science, literature and the arts who had completed certain prescribed work in psychology and in the history, theory and practice of education. This certificate is a license to the holder to teach in any school of the state for two years without examination, and at the end of two years of successful experience may be endorsed and made permanent for this state.

In 1902, Dr. Kiehle resigned from his work in the University, and Dr. George F. James was appointed in his place. In the three succeeding years the enrollment of students in this work increased from less than 100 to over 300. Additional courses were offered, the attendance in these indicating the need of larger opportunities at the University for the training of teachers. In response to the act of the Legislature in 1905 the college of education was authorized by the regents as a separate school. Dr. James was appointed dean and was directed to organize a course of study. The college offers a practical and theoretical training for high school teachers and principals, principals of elementary schools, supervisors of special studies and superintendents of school systems. Students are enrolled after two years of collegiate work for a two-year and three-year course of study leading respectively to the degrees bachelor of arts in education and master of arts. The faculty includes now three professors, two assistant professors and five instructors in addition to fifteen or twenty professors from various faculties of the University, who are interested in one phase or another of teachers' training. The first class was graduated in June 1907. The legislature of 1913 made provision for the first separate building for the use of the college, when it appropriated $54,000 to repair and remodel the school of mines building for the use of this college.

Education in Minnesota. A book published by the H. W. Wilson Company, in 1903. This book which contains much valuable historical material, relating to the University as well as to education in Minnesota in general, was written by Dr. David L. Kiehle, while professor of pedagogy in the University. Valuable to anyone interested in looking up the history of the University. It also contains a report upon the systematic study of and arrangement of the school laws and sources of school support in the state of Minnesota.

Edwards, Austin Southwick, born March 2, 1885, Oswego, N. Y.; American ancestry; instructor in psychology 1912 to date; B. S. Columbia '08; M. A., Minn. '10; Ph. D. Cornell '12; fellow at Cornell; taught three years in public and private schools; has done special research work in the measurement of suggestibility in school children, an experimental study of suggestion; has published report on the same in the American journal of psychology; member, Sigma Xi, Phi Delta Kappa, Minnesota psychological association.

Eighty-nine Memorial Prize in History, The. The class of 1889, at graduation, established a prize of $25, each year, to be known as the '89 Memorial Prize, and to be given for the best thesis upon a historical topic to be assigned by the department. The award is made by a professor of history in some other institution.

This prize has been awarded as follows: the records do not show an award for 1890 and 1891; in 1892, to J. Edward O'Brien; in 1893, to Hubert C. Carel; in 1894, to Clarence Ellithorpe; in 1895, to Alex W. Caldwell; in 1896, to Alexander N. Winchell; in 1897, to George C. Dunlap; in 1898, to John C. Knox; in 1899, to Lillian B. Marvin; in 1900, not awarded; in 1901, to George B. Otte; in 1902, to Willard A. Rossman; in 1903, to Ruth West; in 1904, to Elizabeth McLaughlin; in 1905, to Frederick A. Wirth; in 1906, to Arthur R. Barnes; in 1907, to Harriet Switzer; in 1908, Arnold J. Lien; 1909, Alice E. Schreiber; 1910, Richard Newhall; 1911, Frances H. Relf; 1912, Verna Mabelle Slade, with honorable mention to Louise M. Sumner; 1913, William Anderson, with honorable mention of Ruth Marshall.

Electrical Engineering Building. This was constructed in 1900, at a cost of $20,000, with expectation that it would eventually form one of the wings of a main engineering building to be later constructed. The building is of brick and slow burning construction. The main portion is 80x60 feet and two stories high. A wing, 70x90 feet, adjoining is used for the University lighting plant and for instruction in connection with the practical work of the course. The building contains a standardizing laboratory, electro-chemical laboratory, shop, battery room, stock and toilet rooms. On the first floor are the dynamo laboratory, high tension laboratory, research laboratories, instrument rooms and

office. On the second floor are the laboratories for photometry, photography, meter and lamp testing rooms and class, drawing and library rooms and offices.

In 1913, $18,000 were added to the equipment of this building and changes in the building itself, aggregating $2,000 were made.

Eliot, Ruth, cataloger, 1911 to 1912.

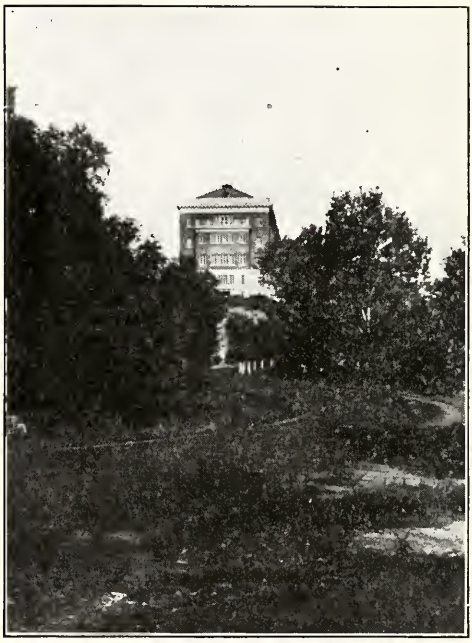
Elliot, Adolphus F. and Mary Ellen Hoar Elliot. Dr. Elliot left his estate to his wife, and she left property which netted the sum of $120,000, to Walter J. Trask, formerly of Minneapolis, but later of Los Angeles, Calif., an attorney, to be used to secure the erection of a building upon the University campus, as a memorial to her husband, Dr. Elliot. Mr. Trask, naturally decided that no other memorial could be so fitting to a physician as a hospital and so made a tender of the property to the board of regents of the University, for that purpose. The regents were willing to accept but felt that they should not bind the state to support such an institution, as they would virtually by accepting the gift outright, and so asked to be allowed to hold the same in abeyance until the legislature could be consulted. This the trustee, Mr. Trask, very readily agreed to and the legislature also authorized the acceptance of the gift.

Dr. Elliot was formerly a practicing physician in Minneapolis and his wife, was formerly Miss Mary Ellen Hoar, a daughter of Michael Hoar, employed on the Sibley estate at Weston, fifty years ago. On her mother's death she was cared for by Mrs. Richard Holbrook and assumed the name Holbrook. She and Dr. Elliot were married about 1895. Prior to her death, Mrs. Elliot gave the school of mines $5,000, the income of which is to be used to assist students needing financial aid to finish their courses in that school.

Elliot Scholarship Loan Fund, The. To fulfill the wish of the late Dr. A. F. Elliot to aid young men who find their efforts to obtain a practical education embarrassed through lack of means, $5,000, the income from which amounts to $250 per year, was placed in the hands of the regents in 1902, to be used as a scholarship loan fund for assisting young men in the school of mines. The money was not formally turned over to the regents until 1905, being held by Mrs. Elliot, only the income $250, being turned over. On the death of Mrs. Elliot the money was turned over to the board of regents and is now invested in N. P. gold 5 per cent bonds.

The conditions of granting the scholarship loans are: the financial needs of the applicant, his scholarship, moral character, enthusiasm shown in his work and promise of usefulness in his profession. When money is available it may be loaned to pay expenses of worthy students during sickness. The loans are to be repaid, without interest, at the earliest convenience of the recipients.

Elliot Hospital. Funds for the erection of this hospital were provided by the will of Mrs. Adolphus F. Elliot, who desired the net proceeds of the sale of certain property to be used to erect a memorial to her husband. The trustee, Mr. Walter J. Trask, asked that the money $113,000, which with interest amounted to $120,000,



be used to erect a hospital; this was supplemented by a legislative appropriation of $40,000. The building was completed August 1911. It is a four story brick and stone structure and is fire proof. It contains 120 beds, as follows: 60 medicine, 40 surgery, 20 obstetrics. At the present time only internal medical, surgical and obstetrical cases are admitted.

Elliott, Charles Burke, first man to receive the degree of doctor of philosophy from the University of Minnesota. University lecturer on corporations and insurance 1889-93; corporations only, 1893-95; corporations and international law 1895-96; international law only 1896-00; special lecturer 1907 to 1909; See first edition.

Elwell, Georgia Belle, assistant in domestic art 1910-11; instructor in domestic science 1911-12.

Emery, Sloan M., Lake City, regent 1889, resigned April 26, 1893.

Emmons, William Harvey, born February 1, 1876, Mexico, Mo.; son of St. Clair Peyton and Elizabeth Harvey Ford Emmons; m. Virginia Cloyd; professor and head of department of geology from 1911 to date; director of state geological survey; A. B., Central, Mo., '97; Ph. D., Chicago, '04; U. S. Geol. survey 1904-06; assistant geologist 1906-09; geologist 1909-12; lecturer on ore deposits '07, petrology '08; assistant professor of petrology and economic geology 1908-09, associate professor of economic geology '09, Chicago; research work, genesis of ore deposits, secondary enrichment ore deposits, outcrops of ore bodies, investigations of many districts in Maine, Tennessee, Colo., Mont., Sonora, Nevada and Utah; publications, topics intimately connected with research work; member, Sigma Xi, American Geol. Soc., Geol. Soc. of Washington, Amer. Inst. mining engineers; Southern Methodist.

Endowment of the University. See Congressional Land Grant.

Engineering, College of. History—Gopher of 1899, pp. 109-123.

Engineering Mathematics Museum. This department has a collection of apparatus used for illustration in teaching, several types of slide-rules, including those of Thatcher, Faber, Keuffel and Esser, Schureman's computer, Boucher's calculator; also Amsler's polar planimeter.

Engineering Museum. The College of Engineering has equipment illustrating the historical development or evolution of many forms of machinery and apparatus in Mechanical and Electrical Engineering. In its shops and electrical laboratory, modern machinery and apparatus is used for actual operation in metal and wood working, and in electrical tests and demonstrations. The new Experimental Laboratory is a large beautiful building devoted to tests of engines, boilers, pumps, the flow of water, the strength of cements and concrete, and many other operations in experimentation and research.

Engineering Shops. This building was erected in 1901, at a cost of $32,000. It was intended to be one wing of a main engineering building to be constructed later. The building is about 60x164 feet and two stories high. It provides offices, class rooms, shops, laboratories, drawing rooms, library room, foundry, machine shops, for the department of mechanical engineering. In 1913 $10,000 of new machinery was added, bringing the equipment up-to-date and greatly increasing the efficiency of the work of the department. The building is of slow burning mill construction and the exterior is red brick.

Engineers Society, The. An organization of students of the college of engineering for mutual help and for the promotion of interest in engineering topics and for the discussion of current engineering literature and problems. The society publishes a year-book. Organized in 1887. Meets twice a month, during the college year. See Gopher of 1900, page 179.

Engineers year book. This was originally an annual publication of the society of engineers. It is devoted to the publication of articles prepared by professors and students upon subjects of special importance to engineers and is an expression of interest in engineering activities on the part of the students. Published annually from the spring of 1893-1908. It was succeeded by the Minnesota Engineer, a quarterly publication.

English Museum. A few fac-similes of manuscripts plates that may serve for the purpose of archaeological instruction, publication of texts, reprints of blackletter books and of original editions, photographs and portraits have been gathered.

Enrollment. The following is a statement of attendance, by years, since the opening of the University in 1868.

1868, 72; 1869, 146; 1870, 212; 1871, 225; 1872, 265; 1873, 278; 1874, 287; 1875, 237; 1876, 267; 1877, 304; 1878, 371; 1879, 386; 1880, 308; 1881, 271; 1882, 253; 1883, 223; 1884, 289; 1885, 310; 1886, 406; 1887, 412; 1888, 491; 1889, 781; 1890, 1,002; 1891, 1,183; 1892, 1,374; 1893, 1,620; 1894, 1,828; 1895, 2,171; 1896, 2,467; 1897, 2,647; 1898, 2,890; 1899, 2,925; 1900, 3,236; 1901, 3,413; 1902, 3,656; 1903, 3,788; 1904, 3,845; 1905, 3,790; 1906, 3,956; 1907, 4,145; 1908, 4,421; 1909, 5,066, 3,917 collegiate and 1149 non-collegiate; 1910, 5,369, 4,031 collegiate and 1,338 non-collegiate; 1911, 6,037, 4,156 collegiate, 1,639 non-collegiate and 287 in extension courses; 1913, 8,204, 4,008 collegiate, 3,374 non-collegiate and 822 in extension courses.

In 1881-82, there were 42 students enrolled in the summer school of science; in 1882-83, there were 23 enrolled, in 1883-84, 105 were enrolled. During the same years, the attendance at the Farmers' Lecture courses was, 191; 281; and 1,118.

Equal Suffrage Club was re-established March 19th, 1912. It has 70 members, any student in the University being eligible to membership. Its purpose is to promote the cause of suffrage for women. Its activities include business meetings, banquets, teas, and educational and membership campaigns. This organization succeeded the Political Equality Club organized in 1909.

Erdmann, Bertha, superintendent of nurses from 1909-10.

Erdmann, Charles A., born August 3, 1866, Milwaukee, Wis.; son of Andrew H. and and Elizabeth Fuchs Erdmann; m. Caroline A. Edgar, Dent '93; two sons, one daughter; demonstrator of anatomy 1893-96; assistant professor of anatomy 1897-01; professor of anatomy 1901-13; associ-

ate professor of gross and applied anatomy to date; Ph. G., Wis. '87; M. D., Minn. '93; has been teaching in the department of anatomy since graduation; research work in articulations and publications along the line of research work including a manual of dissection and atlas on topographic anatomy; member, county, state and national medical associations, A. A. A. S., American assoc. anatomists; Congregationalist.

Erickson, Elov, special lecturer on cultures and starters, 1909, 1910, 1911.

Ericson, Agnes C., assistant in chemistry 1904 to 1911; assistant chemist in the analytical laboratory of the dairy division since 1911. Graduate of the school of agriculture 1902.

Erikson, Henry Anton, born at Mt. Morris, Wis.; Norwegian ancestry; m. Winifred Boynton; one daughter and one son; instructor in physics 1897-06; assistant professor 1906 to date; E. E. '96; Ph. D. '08; graduate work at Chicago, summer 1899; Cambridge, England, 1909-10; had one year's experience in high school work; research work in the ionization of gases at high pressure, recombination of ions in air at different temperattures, an apparatus for the study of the gas law, the absorption of gamma rays by air at different pressures, the recombination of ions in carbon dioxide and hydrogen at different temperatures, a method for charging the needle of a quadrant electrometer; has published a manual of physical measurements, (joint author with Dr. Anthony Zeleny); member Tau Beta Pi, Sigma Xi, Fellow A. A. A. S., member American physical society; Congregationalist.

Essential Nature of Law. A few months before his death, Dean Pattee issued a book entitled "The Essential Nature of Law." Dr. Folwell reviewed this for the Weekly and pronounced it "the most important contribution to science or literature by the University to date." The book was published by Callaghan & Co.

Euterpean Club, The. An organization of young women, similar to the glee club of the young men. Membership in this club is conditioned upon the demonstration of musical ability. The club gives public concerts each year and is under the direction of Professor Scott of the department of music. This club was organized in 1905, and is the successor of the glee club which the young women of the University had previously maintained.

Ewing, Addison Luther, born September, 1853, LaGrange, Wis. State normal school, Wisconsin; B. S. Cornell, 1880; M. S. 1885. Taught in district schools, Jefferson, Wis., 1876-77; instructor in botany, Cornell, 1882-84; professor geology and zoology, Pa. State college; 1884-88, science teacher, Workingman's school, New York City; 1888-1906, professor of science, state normal school, River Falls, Wis. Instructor in agricultural physics, 1906 to date. Author of report of geology of Center county, Pa.; An attempt to determine the time for chemical erosion of Uiltany valley, Pa. Member of the American association for the advancement of science; New York academy of science; Wisconsin academy of science; and other scientific societies.

Ewy, Edwin W., assistant in botany 1911-12.

Expenditures. See Finances.

Expenses of Students. The following statement was prepared by Professor L. H. D. Weld, of the department of University statistics in the spring of 1913.

2,659 students responded to request for information—92.7 per cent of the collegiate students. 47.6 per cent of the men and 11.9 per cent of the women did outside work during the college year. Average earnings of men who worked was $161.16; of women was $99.14. Aggregate earnings of men and women, $129,487.48. 56 men earned over $400 by outside work; the law school men showing the highest average earnings.

85.1 per cent of the men and 16.2 per cent of the women worked during vacations; the average earnings of the men being $161.51 and the women $68.25 each; the aggregate summer earnings being $237,168-.37. Gross earnings of men and women for the twelve months ending June 1913, was slightly over $400,000.

The principal sources of income were—Salesmen and solicitors, 82; clerical work, 48; waiting on table, 45; student assistant and scholars, 43; newspaper work, 31; musicians, 30; drug clerks, 23; draughting, 22. The women engaged in lines of work as follows: clerical, 13; housework, 12; tutoring 11; musical, 10.

The average number of hours, per week, spent by men in outside work was 17.3; by women, 15,2; 16.4 per cent of the men and 19.4 per cent of the women reported more than 30 hours per week.

The average price per week paid for room rent by men $1.64; by women, $1.77; for all students not living at home $1.68. 30 per cent of the men and 38.5 per cent of the women roomed alone.

The average price paid for board by men, $3.89; by women, $4.04; for all students not living at home, $3.93. 11 men and 7 women reported board at less than $2 per week.

The average total expense for men, including tuition and fees, $536.18; for women, $474.48. The professional schools raised the average for the men. In the college of science, literature and the arts, the average for men was $469.52; for women, $487.90. 17 men and 17 women reported a total expense of less than $250; 62 men and 14 women reported $850 or over.

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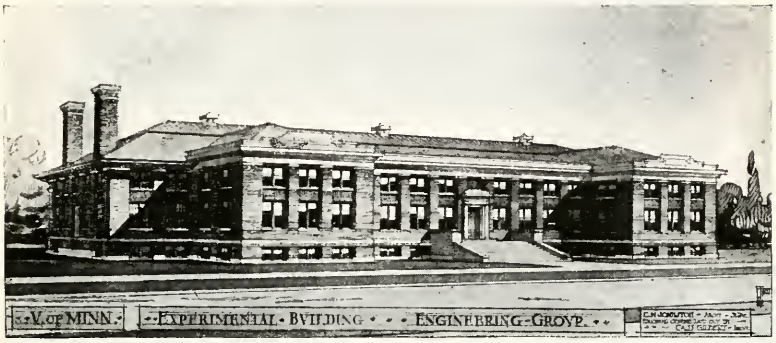
Experimental Engineering Building is located on the east margin of the engineering campus along Union street. The main room in the body of the building has inside dimensions of about 57 x 227 feet. It is all one large beautiful room reaching to the roof with overhead sky-lighting. The walls are of buff enameled brick. The cement floor is of Nile green. The main floor is of heavy reinforced concrete so designed that an engine may be placed anywhere without considering any further foundations or supports. A 10 ton crane travels the full length of the building. In the basement are rooms for the testing of road materials, cements and concretes, a fine wash room with shower baths, a locker room, store rooms, and research and thesis rooms. On the second floor



level a balcony overlooks the main laboratory floor. From this balcony floor, recitation and computing rooms open, and the museum of broken specimens, which is yet to be established. This building was completed and occupied in 1911 and cost $100,000.00. In exterior it is similar in every respect to the main engineering building. It is likewise fireproof throughout.

Experimental Farm at St. Anthony Park. The act granting lands for the endowment of a college of agriculture provided that not to exceed ten per cent of the proceeds from the sale of lands granted might be used for the purchase of an experimental farm. Under the provisions of this act there were set aside $8,500 for the purchase of an experimental farm. The first purchase of land for this purpose was made September 29th, 1868 and the second October 19th of the same year. Ninety-six acres were secured by these purchases and payments were made as follows:

To E. L. Willis	$2,419.00
To D. A. J. Baker	194.55
To H. H. Sibley	2,224.45
Total amount paid	$4,838.00

The following year additional purchases were made and payments were made as follows:

By error	1.96
March 2, B. B. Meeker	500.00
March 15, Pillsbury for Baker	953.00
Total payments	$1,454.96

The total amount of land acquired being 142 acres.

The following year, January 4th, 1870, $122 were paid to Regent Merriman for money advanced by him to Baker on land purchase. The total amount of land purchased was one hundred forty-two (142) acres at a total cost of $6,414.96. $1,413.17 were spent for fencing, interest on money borrowed to make purchase, and to sundry other small bills. The balance $671.87 was applied on a note for $1,500 due B. F. Pillsbury, April 14th, 1884.

This farm was located along both sides of University avenue from Oak street to Prospect park, and was used as an experimental farm until 1882. With the appointment of Professor Porter, in 1881, came a change. Professor Porter reported the farm as being of little value for experimental purposes, recommended the sale of this farm and the purchase of another better suited to the ends to be attained, experimental demonstrations of practical methods of farming. Professor Porter finally decided to recommend the purchase of two tracts of land, aggregating a trifle less than 250 acres.

Upon recommendation of the Board of Regents, the legislature of 1881 gave its sanction to the sale of the farm mentioned above and to the purchase of another farm, better suited to the needs of an experimental farm, out of the proceeds of the sale. The first step was to secure an option on a quarter section of land, N. W. 1-4, Sec. 21, T 29, R 23, less five acres, 155 acres net, for $200 an acre. The land belonged to Captain E. W. Bass.

The old University farm was platted into city lots and a maximum and minimum price fixed for each lot, and the whole put up at auction with the condition that if the minimum price was not bid, the lot would be withdrawn from sale. The first public sale took place October 11, 1882, in the Nicollet House lobby, and 152 lots and a

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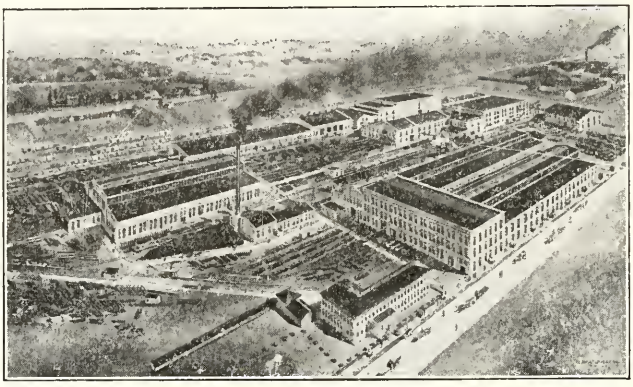
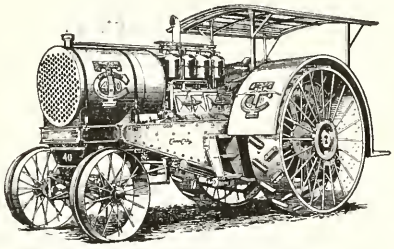


Plant of Minneapolis Steel & Machinery Co., Minneapolis, Minn.



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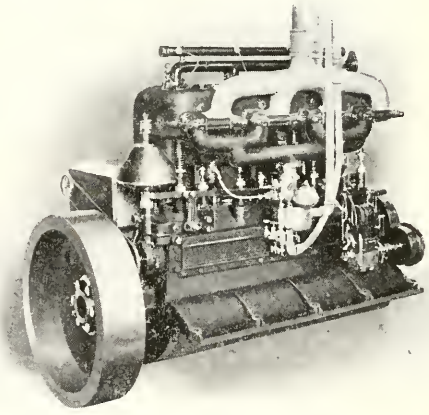

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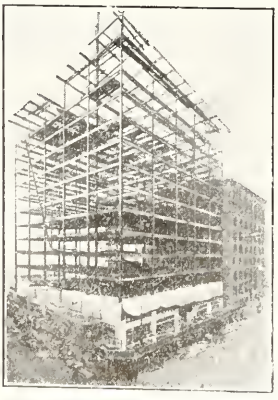

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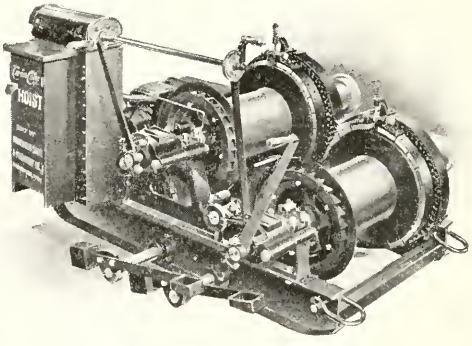

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small triangular piece containing 2 1-2 acres were sold for $47,400. There remained 164 lots. The sale was not completed in October, partly for lack of time and partly because the title to some of the lots could not be perfected until the court had vacated some portions of Baker's addition and the lots had been replatted to conform with the extension of University avenue and parallel streets. The second public auction sale was held at the same place, May 17th, 1883. The amount realized at this second sale, together with subsequent sales, prior to July 1901, was $122,690.42. Subsequent sales, up to July 31st, 1910, amounting to $10,528.66, brought the grand total from sale of lots on the old farm to $180,619.08. From this should properly be deducted $3,071.08, the amount received from sale of stock, stone and fire insurance on old farm building, making the net amount received from sale of lots alone, $177,548.

The cost of making these sales, drawing papers, commissions, rent of lobby, auctioneer fees, and interest on money advanced to make purchase, amounted to $5,505.34. There remained $175,113.74 to be accounted for.

The Regents paid out $70,024.19 for land, as follows:—

Capt. E. W. Bass, 155 acres.....$31,000.00
N. P. Langford, 94 545-1000 acres 28,363.50
Interest on Bass notes..... 2,450.00
The Poehler tract, 8.21 acres (1906) 8,210.69

A large sum was spent in erecting new buildings, $82,353.21 in all. The records do not show just how much was spent for each building, but the following is probably a close estimate—Farm house, $27,353.21; farm barn, $16,000; station building, $16,000; school building $19,000; Green house $4,000. $2,497.25 were spent to furnish the house; $6,471.33 were spent equipping the farm, including machinery, fencing, wells, etc.; the stock purchased cost $7,456.46; and $1,500 were spent fighting the N. P. right of way through the campus. By an act of the legislature the Regents were authorized to pay the balance of the claim of the estate of Paul R. George, amounting to $1,773.83 for money due on the original purchase of the campus, made October 23rd, 1854. $119.50 were transferred to the campus account and the balance $2,917.97, is in the hands of the state treasurer at this date, April, 1911.

In 1905 the legislature made provision for the purchase of additional land and the following year twenty acres were purchased, $8,210.69 were taken from the proceeds of sale of the old farm and the balance, $11,789.31, came out of the $60,000 appropriated to complete the main building and purchase additional land.

The legislature of 1907 appropriated $76,000 for the purchase of 149 acres of land to be added to the experimental farm. The purchase was made and a balance of $3,238.67 remains to the credit of the University. The farm now consists of 418 545-1000 acres of land.

Total receipts in old book.....	$259,615.05
Later sales to July 1910,.....	10,528.66
Total to be accounted for.....	$270,143.71
Refund items, money borrowed, etc..	89,524.63
Balance, money received from sales of all kinds	$180,619.08
Expense of sale, interest, commissions, advertising, etc.	5,505.34
Balance to be accounted for.....	$175,113.74
*Accounting, see list	$174,994.24
Balance turned into campus fund....	$119.50

*Accounting—list.

Land purchased for new farm.....	$70,024.19
Buildings, Total cost	$82,353.21

Farm House

Estimated cost of each—		
Bass 155 acres.....	$31,000.00	
Langford 94 545/1000....	28,363.50	
Poehler tract 8.21 farm	8,210.69	
Interest on Bass purchase	2,450.00	
Farm house	$27,353.21	
Farm barn	16,000.00	
Station buildings	16,000.00	
School building	19,000.00	
Equipment of buildings		$2,497.25
Equipment of farm		6,471.33
Purchase of stock		7,456.46
Balance on the Paul R. George acct.		1,773.83
Legal services to fight right of way		1,500.00
Balance in cash in the state treasury		2,917.97
Total		$174,994.24
Balance from sale of old farm.....		$119.50
Received from state treasury from appropriation for new campus.....		20,000.00
From right of way sold through the campus		28,000.00
Total available		$48,119.50
Total expense of acquiring campus...		48,100.67
Balance		$18.83

This statement, made April 26th, 1911, is not far from correct, though it does not pretend to be accurate to a penny. It is as close a statement as can be made at this time. Some items that appear in the old book are not easily distributed and it has been a matter of judgment just how they should be charged. The item of $1500, for legal services was charged to the sale of the old campus and the balance

of the charge, something over $450, was charged against the campus.

There still remain, unsold, of the original experimental farm the following: Fractional lots 1, 2, 3, 4, 5, 6, 7, 8, 18, 17, 16, 15, and all of lot 14, block 14, and lots 5, 6, 7, block 21, regents addition to Minneapolis.

Experiment Station Building. This building was erected in 1884, from the profits on the sale of the first University farm. It was totally destroyed by fire, October 5th, 1890.

Extempo Oratorical and Story Contest. March 15th, 1901, a contest was held with the University of Nebraska in which the representatives of both institutions were obliged to speak extemporaneously upon a sub-topic, chosen by chance, at the opening of the contest from a number of such topics related to two general topics previously announced. In this contest G. L. Caldwell, Minnesota's representative won. The contest was held at Minneapolis. Nebraska won the story contest.

Extension Debates. In the spring of 1913 six men and two alternates were chosen to represent the University in debate in the University weeks program. These men were prepared to debate either "woman suffrage" or socialism," just as requested by the audience at the time of the debate.

Faculty Dining Club. Organized in 1906 and in existence until 1911. This organization was very informal, all male members of the faculty being eligible. The club met once a month, usually at Donaldson's tea rooms, to dine together and discuss in a more or less informal way problems connected with the life and activities of the University.

Faculty Publications. A faculty committee headed by Dr. J. B. Johnston has prepared for publication a complete bibliography of faculty publications to the end of 1912 or to the date when connection with the University ended. The list is printed in two sections. The first contains research papers and text books of University grade. The second section contains literary, educational and miscellaneous contributions of general interest or permanent value. Secondary text books are included in this section. In the professional schools technical papers, unless they contain research work, have been omitted. Had these been included the size of the publication would have been doubted. Published by the University.

Failure of freshmen, causes of. Professor J. B. Miner made a study of the cases coming before the committee on students' work for a year and wrote an article embodying the results of his study which appeared in the Minnesota Alumni Weekly of November 8, 1909.

Farley, F. A. Instructor in animal husbandry, school of agriculture, 1906-07.

Farmers' Club of Minnesota. An organization composed of students and ex-students and members of the faculty of the school of agriculture. Any one who has ever registered as a student in the regular, dairy or short course or who is or has been a teacher in the school of agriculture, is eligible to membership. The objects of the association are to foster and strengthen the ties between the school and its former students and to extend the work of the school and experiment station among the farmers of the state. To this end the members of the State club have formed county clubs which hold annual meetings for the benefit of the farmers of the community. To quote from the annual address of its president: "The school of agriculture is an institution of the farmers, for the farmers, and supported in a large measure by them, and each student of the school should use his knowledge to better the conditions about him. The state has invested from one to several hundred dollars in his education and expects to realize on that investment by the knowledge which he will distribute."

Farm House. This building was erected in 1884 at a cost of $25,000, the money being provided from the profits on the sale of the first University farm. It is a frame structure 38 x 70 feet, and provides accommodations for the farm help, rooms, and boarding house.

Farmers' Institutes, The. These institutes, or rather the system under which these institutes are provided, is a direct product of the University. In the early eighties, when the University was making the most strenuous efforts to get the farmers to send their children to the University to be educated in agriculture and to become farmers, and when the feeling against the University ran high and every session of the legislature saw determined efforts to divide the University and make the department of agriculture an independent institution, someone conceived the brilliant idea of taking education to the farmer. President Northrop became convinced of the necessity of doing this and looked around for the proper man. F. Amos Johnson, then registrar, suggested the name of O. C. Gregg, of Lynd and he was sent for. After a short talk with President Northrop, the President was convinced that he had found the right man and sent him to Governor Pillsbury, the president of the board of regents. Governor Pillsbury, became an enthusiastic convert to the new plan and the man who proposed it and volunteered to provide the expenses of the work, if Mr. Gregg would take hold of it. The first official action taken by the board of regents was February 10th, when the board authorized Professor Porter to employ Mr. Gregg in institute work and ordering a discontinuance of the farmers' lecture course.

Mr. Gregg began his work in the spring of 1886 and continued the work, under the direction of the board of regents until July 31st, 1887.

In November 1886, the board of regents appointed a committee to wait upon Governors Hubbard and McGill to urge an appropriation of $5,000 for institute work. The committee was instructed to do all in its power to secure the appropriation. The legislature of 1887 made an appropriation of $7,500, 50 per cent more than was first asked, for the purpose, and the administration of the work was entrusted to a special board created by the same act.

Mr. O. C. Gregg, was chosen superintendent, in April 1887, and has held that position for twenty years. The board of regents have always been represented, officially, on the board of managers of these institutes, and at the present time it is represented by three members, the other three members being the presidents of the state societies of agriculture, and horticulture and the state dairy association. The appropriation has increased to $12,500 annually. The school of agriculture was a direct outgrowth of the field work of the farmers' institutes. The organization of the institutes under University supervision is undoubtedly responsible for the fact that the University has been kept intact and its agricultural department an integral part of the University.

Farm Machinery Building. This building was erected in 1904, at a cost of $5,000.

Farmers' Short Course. This course was first offered in 1901-02. It is a special course provided for farmers and farmers' wives, and is given during the month of January. Practical courses in improved methods of farming and instruction in various lines, of special interest and value to men and women who operate and live on farms, is offered. Instruction is given by means of lectures, demonstrations and practice work. 1,333 persons have completed such courses, up to and including the year 1912. A similar course is offered at the Northwest school of agriculture at Crookston.

Farm Students' Review. See Minnesota Farm Review.

Farr, R. E., assistant in surgery, 1902-1906; clinical assistant, same, 1907 to ——; clinical instructor same to date.

Federated Literary Societies of the University of Minnesota, The. The purpose of this federation of literary societies of the University is the promotion of general literary and oratorical work in the University. Organized in 1896. This federation holds four meetings each year at which programs are given by members of the various societies composing the federation. Societies represented are the Forum, Shakopean, Castalian, Minerva and Arena. This federation is now known as the Minnesota literary union.

Feeding Dairy Cows. A bulletin issued by the agricultural department embodying the results of years of experimental work by Professor T. L. Haecker of the department of dairy husbandry and animal nutrition. This bulletin represents the results of a very long and careful series of experiments carried on in the department and is the completest report on the subject in existence.

Ferguson, Cassius M., assistant in moot court and lecturer on Minnesota practice 1911-12.

Fidlar, Edward, demonstrator in pathology and bacteriology 1908-11.

Field, Walter E., superintendent of the farm 1871-1873.

Finke, W. J., instructor in electrical engineering 1910-12.

Finney, Earl Loyd, instructor in mathematics 1912 to date.

Fires. The University has had twenty-two fires during the forty-three years of its existence. On December 3d, 1888, the Agricultural College building, situated where the Chemistry building now stands, was burned. It contained the plant house and the chemical laboratory. The loss was complete. The insurance received was $5,087.

On October 5th, 1890, the Station building at the University Farm was totally destroyed by fire. The insurance received was $10,000.

Pillsbury Hall suffered by fire December 3d, 1889. The insurance received, $10,355.50, covered the loss.

The Old Main building was partially burned twice and was finally destroyed September 24th, 1904. The first fire occurred January 3, 1890. The loss was covered by insurance amounting to $5,587.06. The second fire was that of April 30, 1892, the evening when the play "A Box of Monkeys" was given in the chapel. The loss was fully covered by insurance and was $6,423.99 on building and $2,887.90 on contents. When the last fire occurred, which totally destroyed the building, there was $58,000 insurance collected on the building and $5,000 on the contents.

The Coliseum was totally destroyed by fire on the evening of July 24, 1894. The insurance received was $19,000.

A fire in the Mechanic Arts building on January 13, 1895, resulted in a loss on the building of $806 and on the contents of $1,662.32, which sums were collected from the insurance companies. A second fire occurred in this building, October 29, 1904; the loss on the building was $1,285.46, and on the contents $3,646.30, both of which were fully covered by insurance.

The Laboratory of Medical Chemistry suffered by fire, February 23, 1901. The loss on the building of $2,571.71 and on the contents of $1,664.11 was paid by the insurance companies.

The Main Medical building, now Millard Hall, had a small fire July 22d, 1905. The

insurance received on the building was $3,540.22 and on the contents was $1,083.45.

The Anatomical building was partially burned, January 29, 1902. The loss, fully covered by insurance, was $5,006.73 on the building and $2,564.70 on the contents.

The Ore Testing building was injured by a fire on August 29, 1902. Insurance received on building was $4,112.33, on the contents $2,300.

July 25, 1905, the Anatomical building suffered a second time from fire. The loss of $881.84 on the building and $1,225.56 on contents, was made good by the insurance companies.

The Physical Laboratory had a small fire resulting in a loss of $50, in June, 1898. The loss was paid.

The Main Medical building suffered from fire on January 31, 1909. Insurance collected was $3,774.96 on the building; on contents, $217.00.

On October 20, 1909, the Anatomical building had its third fire, resulting in a loss of $8,167.00 on building, and $$3,500 on contents—the amount agreed upon by the adjustors—and paid.

On December 24, 1909, a fire in Millard Hall damaged the building to the amount of $20,830 and $9,755.27 on the contents. These were the sums agreed to by the adjusters and formed the basis of settlement.

On January 1st, 1912, a fire caught in one of the partitions of the Boiler house and damaged the building and contents to the amount of $1069.08—the amount paid by the insurance companies.

On February 14, 1913, the school of mines building was burned. The contents were totally destroyed; the walls were left in fairly good condition and will be used again when the building will be remodeled for the college of education. The insurance collected on the building was $26,936 and on contents was $13,441.83.

On March 1st, 1912, Millard Hall was, for a second time, seriously injured by a fire which came near making a complete wreck of the building. Portions of the wall were, however, saved. The insurance collected on the building was $30,000 and on contents $13,000—the full amount for which the building was insured.

In March, 1912, a fire was discovered in the laboratory of the attic of the medical science building. The damage which was principally on the contents was estimated at $2,681.47, which was the amount received from the insurance companies.

Originally, all money collected from insurance was used by the regents to replace the loss occasioned by fire. Later, when the Coliseum burned, the state auditor ruled that money collected on buildings burned, when the loss was complete, must go into the general revenue fund of the state and must be appropriated to the institution by the legislature. This rule has not always been followed strictly, but it has been the rule, and the latest case in point is the appropriation of the $58,000 insurance collected on the old main toward the erection of Folwell hall. Information furnished by D. W. Sprague.

Firkins, Ina., B. L., University, 1888; assistant in the library since 1889. Now reference librarian, with rank of assistant professor.

Firkins, Oscar W., B. A., University, 1884; M. A., 1898; assistant rhetoric 1891-97; instructor in rhetoric, 1897-1905; instructor in English and rhetoric, 1905-06; in English only 1906 to 1910; assistant professor same to date.

First Building. What was known as the "academy building" was erected in 1851, at a cost of approximately $2,500, by public subscription. The building had two stories with high basement and stood 30x50 feet on the ground. The building was erected on ground donated by Franklin Steele, "being that part of the green set apart for public purposes, together with six lots in the rear." This amounted to about four acres and was located somewhere between what is now known as Central and First avenues and University avenue and Second street southeast. This land was never formally transferred to the University and was finally quit-claimed by the board of regents in 1862 to the St. Anthony water power company, in consideration of the surrender by the said company of certain notes of the board of regents held by it. These notes, with interest amounted to $4,387.50. The building was sold to Franklin Steele, who paid for the same by assuming the amount of the indebtedness of the University to Paul R. George, incurred by the purchase of the new (part of the present) campus. The building practically passed out of the hands of the regents May 28th, 1856. It was finally burned in November 1864. Picture of this building may be found in Bromley's Minneapolis Album and in Forty years of the University of Minnesota.

First Faculty. Appointed August 23d, 1869. William Watts Folwell, president and professor of mathematics; G. Campbell, professor of moral and intellectual philosophy and instructor in German; Edward H. Twining, professor of chemistry and instructor in French; Versal J. Walker, professor of Latin; Jabez Brooks, professor of Greek; A. B. Donaldson, professor of rhetoric and English literature, Major-general R. W. Johnson, U. S. A., professor of military science and tactics; D. A. Robertson, professor of agriculture; Arthur Beardsley, tutor.

Fish, Daniel, born January 31st, 1848, Cherry Valley, Ill. Admitted to bar, Iowa 1871; member of commission to codify Minnesota laws. Special lecturer on statutory construction and law making, 1907 to 1912.

Fisk, James A., instructor in dairy laboratory, 1906.

Fjedle Relief Figures, upper rotunda of the Library building. The figures in relief

in the spandrels of the arches in the upper rotunda of the Library building were designed and executed by Jacob Fjelde, a Norwegian sculptor of distinguished ability, whose home was for some years in Minneapolis, and who died in 1896, not long after the work in the Library was completed. Mr. Fjelde's work was of so high a character that it should have commanded large financial rewards. Had it done so, the University might not have been fortunate enough to have secured the fine examples of his work represented in the rotunda series. For the twenty-four figures but $25 each was paid. They are easily worth many times that amount. Beginning at the left of the stairs as one ascends, the figures represent:

1, Architecture; 2, Sculpture; 3, Tragedy; 4, Comedy; 5, Archaeology; 6, Ethnology; 7, Medicine; 8, Justice; 9, Microscopy; 10, Astronomy; 11, Philosophy; 12, Folk Lore; 13, Poetry; 14, History; 15, Literature; 16, Research; 17, Harvest; 18, Botany; 19, Civil Engineering; 20, The Artisan; 21, Electricity; 22, Geology; 23, Painting; 24, Music.

See also article in the Ariel of May 16th, 1896, by D. W. Sprague, accountant.

Flag Pole. The pole is a magnificent specimen of Puget sound fir tree and the gift of Messrs. Lewis Schwager, '95, Law, '96, and Walter Nettleton, ex-'00, of Seattle, Washington. The pole is six inches in diameter at the top and slightly over two feet at the base and stands one hundred fifty feet clear of the ground. The pole had to be shipped in two pieces and splicing it caused a loss of six or eight feet. The pole is set in a bed of solid concrete extending twelve feet below the surface.

Flagstad, Carl Oscar, instructor in prosthetic dentistry 1911-13.

Flandreau, Charles E., lecturer on the law of torts 1888-89.

Flather, John Joseph, born June 9, 1862, Philadelphia, Pa.; son of Henry Flather of Norwich, England; m. Harriet Frances Lum; professor of mechanical engineering and head of department 1898 to date; Ph. B., Yale '85; M. M. E. Cornell, '90; practical experience in machine shop as machinist, draftsman, foreman, superintendent and also a designer of special machinery and consulting engineer; research work in the measurement of power, transmission of power and smoke prevention; publications on dynamometers and the measurement of power, rope driving, transmission of power, kinematics, steam boilers; engineer for the Minneapolis civic water commission; member A. A. A. S. (secretary and vice president of section D), Soc. promotion Engineering education (treasurer '94-'99, vice president), chairman committee on entrance requirements, member Am. soc. Mech. Eng., associate member Am. Inst. Elect. Engrs., Sigma Xi, Tau Beta Pi; Methodist.

Fligman, Louis H., assistant in physiology, 1900-02.

F. L. X. A local society organized in 1909 which later, in 1910, became Phi Sigma Kappa.

Folwell, William Watts., born at Romulus, N. Y., February 14th, 1833. Hobart college, 1857; LL. D., same, 1880; taught languages in Ovid academy, 1857-58; adjunct professor of mathematics, Hobart, 1858-60; student in Berlin, 1860-61; member of the 50th New York volunteers; 1st lieutenant to major; brevet lieutenant colonel, 1862-65, engineers corps; professor

in Kenyon college, Gambier, Ohio, 1869; President of the University of Minnesota, 1869-84; ex-officio regent for same period; professor of political science from 1875-07; professor emeritus; librarian from 1869-06. Minnesota centennial commissioner 1876; president of Minneapolis society of fine arts, 1882-92; member of the Board of park commissioners, 1889-06; president of same, 1894-01; acting president of the American economic association, 1892; chairman of the State board of corrections and charities, 1895-01; president of Minneapolis improvement league, 1902-05; author of numerous addresses and papers and a History of Minnesota which is about to be published. For fuller biographical sketch, see Gopher of 1889, pp. 107-112, also Forty years of the University of Minnesota pp. 322-325.

Folwell, William Watts. An address made by W. F. Webster, '86, at the annual meeting of the General Alumni Association held February 14, 1913, Dr. Folwell's 80th birthday. Printed in the Minnesota Alumni Weekly of February 17, 1913.

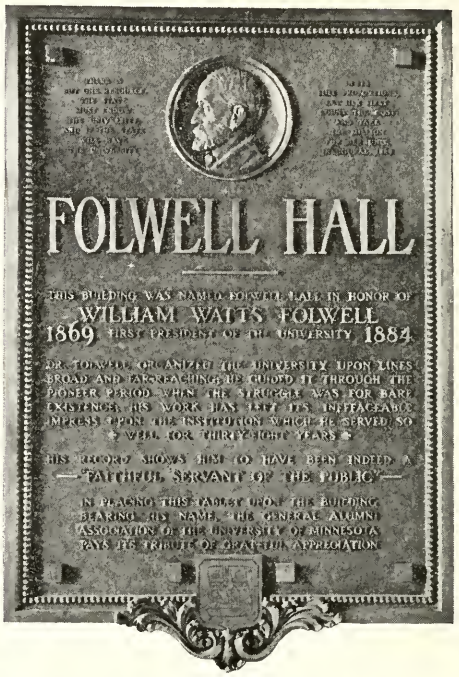
Folwell Birthday Celebration. The alumni made February 14, 1911, Dr. Folwell's seventy-eighth birthday, an occasion for a special celebration. Dr. Folwell, who was spending the winter in Washington, was guest of honor of the Washington alumni for that evening and was presented with an engrossed address from the General Alumni Association and five hundred letters from as many alumni, congratulating him upon his birthday and recalling some happy incident of the writer's relations with Dr. Folwell and wishing him many happy returns of the day. In addition the class of 1907 presented Dr. Folwell a bronze medallion on that occasion and both houses of the legislature passed resolutions congratulating Dr. Folwell and extending an expression of good will on behalf of the people of the state. Announcement was also made at this meeting of the plan to place a tablet in honor of Dr. Folwell in Folwell hall. Later, the letters

were bound in a specially designed cover for better preservation. For a full report of this occasion see the Minnesota Alumni Weekly of February 20, 1911.

Folwell Hall. Named in honor of Dr. William Watts Folwell, first president of the University. The legislature of 1905 made an appropriation of $350,000 for the erection of this building. It was also agreed that the insurance received from the "old main" should be used to help erect and equip this building. This action added $65,000 making the amount available $415,000. The building faces University avenue and stands back about forty feet from the sidewalk, extending from 15th to 16th avenues. The building is fire-proof throughout and is constructed of brick, terra cotta made in imitation of granite, with cut granite used for foundation and basement. Concrete is used for floors and some walls, and tiling for the balance of the walls. The wood work is oak, stained dark and the furniture is mission style throughout. The hall of the main floor is lined throughout with a very fine grade of

marble. The building is 322x80 feet and provides about 90,000 square feet of floor space. It has three stories above the basement and provides for the departments of anatomy, French, German, Greek, Latin, mathematics, oratory, philosophy, philology, rhetoric, Scandinavian, sociology, Spanish. In addition to the full equipment of classrooms, offices, studies, seminars, museums, etc. for the departments above mentioned, the building contains the office of the deans of the college of science, literature and the arts, and the college of education; offices for the various University publications; for the literary societies; study rooms for men and women; a faculty parlor; janitors' rooms, toilet rooms, work rooms, etc. Work on basement was begun in the fall of 1905 and the building was completed and occupied in September, 1907.

Folwell Tablet. The tablet placed in Folwell Hall by the General Alumni Association of the University was dedicated June 7, 1911. The tablet is of bronze and was manufactured by the American Ornamental Iron and Bronze Co., after a design suggested by the officers of the General Alumni Association. The bas-relief of Dr. Folwell which appears in the upper part of the tablet was made by Charles S. Wells of this city. The cut of the tablet which accompanies this item will give a better idea of the tablet than any de-



scription. For fuller statement see the Minnesota Alumni Weekly of June 12, 1911.

Foot ball. This publication was issued during the fall of 1899, the first issue coming out October 17, the last issue being that of November 24th. It was started for the express purpose of arousing interest in football and to support the team. This publication was the direct forerunner of the Minnesota Daily which was started in the spring of the following year.

Football. For extended history of the game at Minnesota see Gopher of 1901, page 286; also, 1st edition of dictionary; also, Forty years of the University of Minnesota, page 207-223.

Football Captains. 1887, Howard T. Abbott; 1888, Alfred F. Pillsbury; 1889, Alfred F. Pillsbury; 1890, Horace R. Robinson; 1891, William C. Leary; 1892, Alfred F. Pillsbury; 1893, James E. Madigan; 1894, Everhart P. Harding; 1895, Augustus T. Larson; 1896, John M. Harrison; 1897, John M. Harrison; 1898, Henry A. Scandrett; 1899, Henry A. Scandrett; 1900, Leroy A. Page; 1901, Warren C. Knowlton; 1902, John G. Flynn; 1903, Edward Rogers; 1904, Moses L. Strathern; 1905, Earl Current; 1906, Earl Current; 1907, John Schuknecht; 1908, Orren Safford; 1909, John McGovern; 1910, Lisle Johnston; 1911, Earl Pickering and Reuben Rosenwald; 1912, Paul Tobin; 1913, Donald Aldsworth.

MINNESOTA FOOTBALL RECORD--

	**Games played	Lost	Won	Tied	Scores Minn-Opponents		*Total Score	
1900	6	0	5	1	103	23	308	25
1901	5	0	5		67	18	183	18
1902	6	2	4		84	34	342	39
1903	6	0	6		222	6	657	12
1904	6	0	6		173	12	792	12
1905	6	1	5		146	28	522	28
1906	5	1	4		47	29		
1907	5	2	2	1	55	52		
1908	6	2	3	1	32	50		
1909	7	1	6		158	27		
1910	7	1	6		179	6		
1911	7	0	6	1	102	15		
1912	7	3	4		87	38		

*Including games against minor teams.
**Does not include minor teams.

Football Scores.

1889—Minnesota vs. ex-collegians, 10-0; vs. *Shattuck, 8-28; vs. Shattuck, 26-0; vs. ex-collegians, 2-0.

1890—Minnesota vs. *Shattuck, 58-0; vs. ex-collegians, 0-0; vs. Grinnell, 18-13; vs. Wisconsin, 63-0; vs. ex-collegians, 11-14; vs. ex-collegians, 14-6.

1891—Minnesota vs. ex-collegians, 0-4; vs. Wisconsin, 26-12; vs. Grinnell, 12-12; vs. University of Iowa, 42-4; vs. Grinnell, 22-14.

1892—Minnesota vs. ex-collegians, 18-10; vs. Michigan, 14-6; vs. Grinnell, 40-24; vs. Wisconsin, 32-4; vs. Northwestern, 18-12.

1893—Minnesota vs. Michigan, 34-20; vs. Wisconsin, 40-0; vs. Northwestern, 16-0; vs. Grinnell, 36-6; (vs. Kansas, 12-6; vs. Hamline, 10-6).

1894—Minnesota vs. Grinnell, 10-2; vs. Purdue, 24-0; vs. Beloit, 40-0; vs. Wisconsin, 0-6.

1895—Minnesota vs. high school, 20-0; (vs. Macalester, 40-0;) vs. Grinnell, 4-6; vs. Wisconsin, 14-10; vs. boat club, 6-0; vs. Ames, 24-0; vs. Chicago, 10-6; vs. Michigan, 0-20; vs. ex-collegians, 14-0; vs. Grinnell, 4-6; vs. Purdue, 4-18.

1896—Minnesota vs. South high school, 34-0; vs. Central high school, 50-0; vs. Carleton, 16-6; vs. Grinnell, 12-0; vs. Purdue, 14-0; vs. Ames, 18-6; vs. ex-collegians, 8-0; vs. Michigan, 4-6; vs. *Kansas, 12-0; vs. *Wisconsin, 0-6.

1897—Minnesota vs. South high, 22-0; vs. Macalester, 26-0; vs. Carleton, 48-6; vs. Grinnell, 6-0; vs. Ames, 10-12; vs. *Purdue, 0-6; vs. *Michigan, 0-14; vs. Wisconsin, 0-39.

1898—Minnesota vs. Carleton, 32-0; (vs. Rush medics, 12-0;) vs. Grinnell, 6-16; vs. Ames, 0-6; vs. Wisconsin, 0-28; vs. N. D., 15-0; vs. Northwestern, 17-6; vs. Illinois, 10-11.

1899—Minnesota vs. Shattuck, 40-0; vs. Carleton, 35-5; vs. Ames, 6-0; v. Grinnell, 5-5; (vs. Alumni, 6-5; vs. Beloit, 5-5;) vs. Northwestern, 5-11; vs. Wisconsin, 0-19; vs. *Chicago, 0-29.

1900—Minnesota vs. Central high, 0-0; vs. St. Paul high, 26-0; vs. Macalester, 65-0; vs. Carleton, 44-0; vs. Ames, 27-0; vs.

Chicago, 6-6; vs. Grinnell, 26-0; vs. N. D., 34-0; vs. Wisconsin, 6-5; vs. Illinois, 23-0; vs. Northwestern, 21-0; vs. Nebraska, 20-12

1901—Minnesota vs. St. Paul high, 16-0; vs. Carleton, 35-0; vs. Chicago P. and S., 27-0; vs. Nebraska, 16-0; vs. Iowa, 19-0; vs. Haskell, 28-0; vs. N. D., 10-0; vs. Wisconsin, 0-18; vs. Northwestern, 16-0; vs. Illinois, 16-0.

1902—Minnesota vs. Hamline, 59-0; vs. Central high, 24-0; vs. Carleton, 33-0; vs. Ames, 16-0; vs. Beloit, 29-0; vs. Nebraska, 0-6; vs. Iowa, 34-0; vs. Grinnell, 102-0; vs. Illinois, 17-5; vs. Wisconsin, 11-0; vs. College team, 11-5; vs. Michigan, 6-23.

1903—Minnesota vs. Central high, 21-6; vs. St. Paul high, 36-0; vs. East high, 37-0; vs. Carleton, 29-0; vs. Macalester, 112-0; vs. Grinnell, 40-0; vs. Hamline, 65-0; vs. Ames, 46-0; vs. Iowa, 75-0; vs. Beloit, 46-0; vs. Wisconsin, 17-0; vs. N. D. Ag. Col., 49-0; vs. Illinois, 32-0; vs. Lawrence, 46-0; vs. Michigan, 6-6.

1904—Minnesota vs. Minneapolis and St. Paul Central high school teams, 176-0; vs. S. D., 77-0; vs. Shattuck, 74-0; vs. Carleton, 65-0; vs. St. Thomas, 47-0; vs. N. D., 35-0; vs. Ames, 32-0; vs. Grinnell, 146-0; vs. Nebraska, 16-12; vs. Lawrence, 69-0; vs. Wisconsin, 28-0; vs. Northwestern, 17-0; vs. Iowa, 11-0.

1905—Minnesota vs. Minneapolis and St. Paul Central high teams, 74-0; vs. Shattuck, 33-0; vs. St. Thomas, 42-0; vs. N. D., 45-0; vs. Ames, 42-0; vs. Iowa, 39-0; vs. Lawrence, 46-0; vs. Wisconsin, 12-16; vs. S. D., 81-0; vs. Nebraska, 35-0; vs. Northwestern, 72-6.

1906—Minnesota vs. Ames, 22-4; vs. Nebraska, 13-0; vs. Chicago, 4-2; vs. Carlisle, 0-17; vs. Indiana, 8-6.

1907—Minnesota vs. Ames, 8-0; vs. Nebraska, 8-5; vs. Chicago, 12-18; vs. Carlisle, 10-12; vs. Wisconsin, 17-17.

1908—Minnesota vs. Lawrence, 6-0; vs. Ames, 15-10; vs. Nebraska, 0-0; vs. Chicago, 0-29; vs. Wisconsin, 0-5; vs. Carlisle, 11-6.

1909—Minnesota vs. Lawrence, 25-0; vs. Iowa, 41-0; vs. Ames, 18-0; vs. Nebraska, 14-0; vs. Chicago, 20-6; vs. Wisconsin, 34-6; vs. Michigan, 6-15.

1910—Minnesota vs. Lawrence, 34-0; vs. South Dakota, 17-0; vs. Ames, 49-0; vs. Nebraska, 27-0; vs. Chicago, 24-0; vs. Wisconsin, 28-0; vs. Michigan, 0-6.

1911—Minnesota vs. Ames, 5-0; vs. South Dakota; 5-0; vs. Nebraska, 24-3; vs. Iowa, 24-6; vs. Chicago, 30-0; vs. Wisconsin, 6-6; vs. Illinois, 12-0.

1912—Minnesota vs. South Dakota, 0-10; vs. Ames, 5-0; vs. Nebraska, 13-0; vs. Iowa, 56-7; vs. Illinois, 13-0; vs. Wisconsin, 0-14; vs. Chicago, 0-7.

Football, a study of. See Minnesota Alumni Weekly of February 12, 1912 and March 18th and 25th, 1912.

Ford, Daniel, born September 3, 1876, at Cambridge, Mass.; m. Amy Wartman Howell; appointed assistant professor of Rhetoric 1910; B. L., Dartmouth, 1899, Phi Beta Kappa; taught in the Case School of Applied Science, Cleveland, Ohio., 1902-04; at the University of Nebraska, 1905-10; member Modern Language Association; Congregationalist.

Ford, Guy Stanton, born May 9, 1873, Salem, Wis., son of Thos. D. and Helen Shumway Ford; New England ancestry; m. Grace V. Ellis; one daughter and one son; professor of European history, chairman of the department and dean of the graduate school since 1913; B. A., Wis., '95; Ph. D., Col., '03; Graduate work at Wisconsin, Berlin and Columbia; superintendent of schools, Grand Rapids, Wis. 1895-98; instructor and assistant professor of history, Yale, 1901-06; professor of modern European history, Ill., 1906-13; research work in the field of Prussian history; editor of Essays in American history, '11; Hanover and Prussia 1795-1803; numerous articles in technical publications and in proceedings of historical societies; member, Theta Delta Chi, University Club of Ill., Ill. Univ. golf club; Congregationalist.

Forensic Honor League. Organized at the University as a purely local honorary fraternity, in 1904. Its membership is limited to men who have represented Minnesota in an intercollegiate forensic contest. Its active membership is confined to men duly elected and resident at the University. In May, 1906, representatives of the universities of Michigan, Wisconsin, Illinois, Nebraska, Iowa and Northwestern, upon the initiative of Minnesota, met and organized this previously local fraternity into an intercollegiate honorary fraternity, under the name of Delta Sigma Rho.

Forensic Recognition. In 1913, the University instituted a new plan of recognition of specially meritorious work in the line of debate and oratory. The recognition takes the form of a framed certificate printed on parchment. The certificate reads as follows: "The University of Minnesota awards this certificate to (name) in recognition of his (her) service as a representative of the University in intercollegiate debate (or oratory). The certificate is signed by the President of the University and the professor who trained the debater or orator.

Forestry Club. See next page

Forty years of the University of Minnesota. Issued by the General Alumni Association at Commencement time 1910 and dedicated to President Cyrus Northrop. The book comprises six hundred and forty pages with three folded inserts. The following is the table of contents; introduction, 1-16; beginnings of the University 17-31; President Folwell's administration, 31-50; President Northrop's administration, 51-80; University chronicles, 81-87; University lands, 89-94; the colleges, 95-180; gifts and benefactions, 181-192; miscellaneous—dean of women, library, military, athletics, alumni, buildings, attendance,

193-242; miscellaneous items of interest, 243-250; President Northrop, 251-264; biographies, 265-450; regents, 451-460; faculty, 461-484; Alumni directory, 485-585; University laws, 597-635; index, 637-639.

Forum Literary Society was established in 1897. Its membership includes thirty men interested in debate, public speaking and literary activities. Its purpose is to foster and promote public speaking and to train its members therein. Its activities include debates and oratorical contests. This society won the intersociety debates for three successive years and now has permanent possession of the Jacob's cup.

Forestry Club was established May 20th, 1907. The purpose of the club is to further the highest interests of the college of forestry. The club holds regular biweekly meetings for social intercourse and professional discussion. Its constitution was amended in 1909 and reconstructed in 1911. Membership 40.

Foster, Burnside, born May 7, 1861, Worcester, Mass.; American ancestry; m. Sophie Vernon Hammond; two daughters, one son; clinical professor and demonstrator of dermatology 1888 to 1907; clinical professor of diseases of the skin and lecturer upon the history of medicine 1907-13; professor of dermatology and syphilology, to 1913; A. B. Yale '82; M. D. Harvard '85; has been engaged in practice of medicine in Minneapolis and St. Paul since 1887; editor St. Paul medical journal; has made numerous contributions to current medical literature; member, Ramsey Co., Minnesota state, and American medical associations, American Dermatological association.

Foster, William K., born December 1, 1878, White Plains, Ala.; American ancestry; m. Anna Ottilhe Streech; one daughter; assistant director of the gymnasium 1908 to date; LL. B., '08; L. L. M. '09; member N. W. Gym. Soc., Minn. Soc. of Physical education.

Fraiken, Harry J., instructor in iron work, 1891-92.

Frankforter, George Bell, born April 22, 1860, Potter, Ohio. Lincoln, Neb., high school; B. A., Nebraska, M. A., Nebraska; Ph. D., Royal university of Berlin, where he studied four years; one year in Royal mining academy, Berlin. One year teacher of chemistry, geology and physics, Lincoln, Neb., high school; four years as instructor in chemistry and music, University of Nebraska; lecturer on chemistry and professor of analytical chemistry, same institution; commissioner of the United States mint; special water analyst for U. S. geological survey. Professor of chemistry, University, 1893-95; and director of the laboratory, 1895 to date; and dean of the school of chemistry, 1902 to date. Author of papers Opium Alkaloids Resulting in the Synthesis of Alkaloidal Narceine; Preparation of Sodium Narceiate (Anti-spasmine); The Alkaloidal Vertarine; on Isopyrum Resulting in the Discovery of the Alkaloidal Isopyroine; on Phytolacca Decandra; on Formaldehyde, including a new method of volumetric determination; its liberation from solution for disinfecting purposes, by means of potassium permanganate; on the Terpines, including two new terpines; The Chlorohydrochlorides; Some New Forms of Lecture Apparatus; Qualitative Analysis, Staedeler, Kolbe, Abeljance, Frankforter, translated, revised and enlarged. Fellow of American association for the advancement of science; member Deutchen chemischen gesellschaft; member Electrochemischen gesellschaft; Society of chemical industry; American chemical society; Society for the promotion of engineering education; American health association.

Franklin, Benjamin, Winona, regent 1868 to date of death, August 19th, 1868.

Franklin, Henry J., instructor in entomology 1908-09.

Franklin, Laura, instructor in English and preceptress, Crookston school of agriculture, 1911-1912.

Frary, Francis Cowles, born July 9, 1884, Minneapolis; son of Francis Lee and Jeanette Cowles Frary; m. Alice Hall Wingate; student assistant department of chemistry 1903-05; instructor 1905-11; assistant professor 1911 to date; A. C. '05; M. S. '06; Ph. D. '12; one year's graduate work in the University of Berlin; research work in firpene and pinene, apparatus for rapid electroanalysis, determination of zinc, preparation of calcium, rapid determination of copper, microstructure of the wet-plate, direct production of positives in the camera, systems containing alcohols, salts and water; publications, reports on research work and in various scientific journals, also joint author with Dean Frankforter of Studies in chemistry No. 1 University publications; member Sigma Xi, Alpha Chi Sigma, American chemical society, American electrochemical society, Deutsche Bunsen-Gesellschaft fur angewandte physikalische Chemie, 8th international congress of applied chemistry; Congregationalist.

Frary, Hobart D., instructor in mathematics 1910-11.

Fraternities. Acacia, *Alpha Chi Sigma, Alpha Delta Phi, *Alpha Kappa Kappa, *Alpha Kappa Phi, *Alpha Kappa Sigma, Alpha Tau Omega, *Alpha Zeta, Beta Theta Pi, Chi Psi, Delta Chi, Delta Kappa Epsilon, *Delta Phi Delta, *Delta Sigma Delta, Delta Tau Delta, Delta Upsilon, Kappa Sigma, *Nu Sigma Nu, *Phi Beta Pi, *Phi Delta Chi, *Phi Delta Kappa, *Phi Delta Phi, Phi Delta Theta, Phi Gamma Delta, Phi Kappa Psi, *Phi Rho Sigma, Phi Sigma Kappa, Psi Upsilon, Sigma Alpha Epsilon, Sigma Chi, Sigma Nu, *Sigma Rho, Theta Delta Chi, Theta Mu Epsilon (charter surrendered), *Theta Tau, *Xi Psi Phi, Zeta Psi. Local—Chi Rho Theta, Svithoid, Theta Phi (extinct), Thulanian.

Fraternities, Statistics. There are twenty national and three local fraternities at the University; the national fraternities have a membership of 425; the locals a membership of 88—a total membership of 513. There are sixteen professional fraternities at the University with a membership of 403 men.

Fraternity Chapter Houses. An article on Fraternity chapter houses written by Edward E. McDermott, appeared in the March 1909 number of the Delta Upsilon Quarterly. The article presents the results of an exceedingly thorough and careful study of the question.

Fraternity Houses. The following named fraternities own their own houses: Alpha Delta Phi, 1725 University Ave. S. E.; Alpha Tau Omega, 1018 4th St. S. E.; Alpha Zeta, 2089 Carter Ave., St. Paul; Beta Theta Pi, 1625 University Ave. S. E.; Chi Psi, 1515 University Ave. S. E.; Delta Chi, 1108 4th St. S. E.; Delta Kappa Epsilon, 1711 University Ave. S. E.; Delta Tau Delta, 1009 University Ave. S. E.; Delta Upsilon, 10th & University S. E.; Phi Beta Pi, 329 Union St. S. E.; Phi Delta Theta, 1029 University Ave. S. E.; Phi Gamma Delta, 1129 University, S. E.; Phi Kappa Psi, 1609 University Ave. S. E.; Phi Sigma Kappa, 820 University Ave. S. E.; Psi Upsilon, 1721 University Ave. S. E.; Sigma Alpha Epsilon, 1121 University Ave. S. E.; Sigma Nu, 324 15th Ave. S. E.; Theta Delta Chi, 1521 University Ave. S. E.; Zeta Psi, 315 10th Ave. S. E.; Alpha Kappa Phi, 1214 4th St. S. E.; Thulanians, 1025 4th St. S. E.

The following own their lots and will build in the near future, Alpha Kappa Kappa, Kappa Sigma and Sigma Chi.

There are ten sororities at the University with a membership of 276 and two professional sororities with a membership of 29.

Frazier, William H., born Waynetown, Ind., March 6, 1883; Scotch ancestry; assistant in chemical laboratory, Wabash college, 1903-04; assistant in chemistry, experiment station, 1906-07; instructor in agricultural chemistry 1907 to 1912; assistant professor of soils and fertilizers, also assistant in soils and fertilizers division of the state experiment station; B. S. '07; research work in soil fertility of Minn. Soils, soil survey methods, uses of commercial fertilizers; member Sigma Xi, Alpha Chi Sigma, American agronomy soc., Minn. State dairyman's association, Minn. horticultural soc.

Frear, Jenness B., born January 24, 1882, Minnetonka Mills, Minn.; French Hugenots and early English ancestry; instructor in mechanics, department of agriculture 1912-13; school of agriculture—M. E. '10; member Sigma Xi, Tau Beta Pi, Society for the promotion of engineering education; Christian scientist.

Freeman, Charles Doney, clinical assistant in dermatology and venereal diseases 1911 to 1913; instructor in dermatology and genito-urinary diseases 1913-.

Freeman, Edward Monroe, born February 12, 1875, St. Paul; of Swiss ancestry; m. Grace Dorothy Studeman; one son; instructor in botany and pharmacognosy, 1898-01; assistant professor of botany, 1902-05; pathologist in charge of diseases of grain crops, U. S. Depart. Agr., 1905-07; professor of botany and plant pathology, 1907 to date; same and assistant dean to date; B. S., '98; M. S., '99; Ph. D., '05; research work on mycology and plant pathology, particularly problems of parisitism in cereal rusts and smuts; publications dealing with field of special investigation including among the more important: The seed fungus of lolium temulentum L. Phil., '03; Minnesota plant diseases, '05; The loose smuts of barley and wheat, '09; member, Phi Betta Kappa, Sigma XI, Botanical society of America, American phytopathological society, American breeders association, Botanists of central states, Minn. ed. association, Minn. state hort. soc., fellow A. A. A. S.

Frelin, Julius T., born March 13, 1870, in France. Public schools of France; Mankato State Normal school; B. A., University, 1905. Taught nine years in graded and high schools of Minnesota; nine months among the Igorote head hunters on North Luzon, P. I., and two years among the semi-civilized tribes of same. Scholar in French, University, 1904; instructor, 1905; assistant professor since 1907.

French, Robert Wilton, born January 28, 1885, Ft. Wayne, Ind., mother, Scotch, father, early New England; m. Aldean Todd; one daughter; instructor in engineering drawing 1910 to date; B. S. in civil engineering, Mich., '07; three and a half year's work in designing, structural and machinery; nine months road and pavement inspection and surveying; assistant on field sales Northern engineering works, Detroit, Mich., member Palestine lodge (masonic), Episcopalian.

Fridley, A. M., St. Anthony. Regent 1855-1860.

Fruit Breeding Farm. This farm was purchased by the regents July 20, 1907, pursuant to the provisions of chapter 334 of the laws of 1907. The farm was purchased of Daniel Fink for $105 per acre, there being 77.89 acres, the purchase price was $8,178.45. The land lies in section 7, of township 116, range 23 West (Carver county).

This station was established for the express purpose of breeding hardy fruit trees for Minnesota. Some 15,000 plum and apple seedlings have been transferred from the main station to this station. Thousands of crosses have been made under glass and their seedlings planted in the field, promising results having been secured. Thousands of seedling strawberries, raspberries and grapes have fruited; among these seedling grapes is one that is said to be hardier and of better quality than Beta. These seedlings will be available for the people of the state as soon as they demonstrate their superior value.

Fry, Susannah, born in Ohio. Ohio Wesleyan university, 1878; Syracuse, 1881. Traveled and studied in Europe 1873-74. Professor of belles letters in Illinois Wesleyan university from 1876-90. Professor of English in University Minnesota for 1892, during the absence of Dr. MacLean in Europe.

Frye, Phyllis, assistant in domestic art 1912-13.

Fuller, Helen, instructor in dentistry, 1912-13.

Fulmer, Elton, professor of agricultural chemistry 1909.

Fulton, H. A., assistant in dairy school 1897-99.

Fulton, John F. Professor of ophthalmology and otology, 1888-03.

Furber, J. W., Cottage Grove. Regent 1851-54.

Fyans, Joseph E. L. Instructor in French, 1903-05.

Gaines, Alvin D. Instructor in language, history and music, school of agriculture, 1895-98.

Gale, Harlow Stearns. A native of the city of Minneapolis. Graduated at the Central high school in 1880. Entered Yale in the fall of 1881, and was graduated with degree of A. B. in 1885. The two following years were spent at the University of Minnesota, pursuing post-graduate work in economics under Dr. Folwell, while he studied ethics by himself. Spent two years in Philosophy at Yale, one year at Cambridge under Professor Sidgwick in logic and ethics four years in Leipsic spent under Wundt, with the exceptions of one semester at the University of Minnesota. In the fall of 1894 accepted the position of instructor in psychology which position he held until 1903.

Gallow, John E. Janitor 1881-86.

Gammi Phi Beta. Kappa chapter established in 1902. Founded at Syracuse in 1784.

Gardener, E. Assistant in obstetrics and gynecology, 1913.

Garrott, Mrs. Jane, assistant in Rhetoric 1909-10.

Gaumnitz, Daniel A. B. Ag., University, 1904; asistant instructor in animal husbandry, 1904-07; assistant professor of animal husbandry, 1907 to 1911; 1910-11 1st assistant in charge of beef cattle investigations. Member of the board of the General Alumni association.

Geissendoerfer, John Theodore, born September 26, 1885, Kimball, S. D.; German ancestry; instructor in German 1912 to date; B. A., Wis., '07; Ph. D., Pennsylvania, '12; taught two years in state university of Iowa, University of Pennsylvania two years; research work on Dickens' Influence on the German novel, Brentano's influence upon Heine; member, Modern language association.

Geist, Emil Sebastian, born May 9, 1878, St. Paul; German ancestry; m. Augusta Ohage; one son; clinical assistant in orthopedia, 1905 to 1907; clinical instructor of orthopedic surgery 1909 to date; M. D. '00; graduate work in Paris, Vienna, Breslau, 1901-04; research work and publications along the line of his specialty, orthopedic surgery.

General Alumni Association. Movement started at commencement time in 1900. Constitution adopted January 30th, 1904. Membership composed of graduates of all departments of the University. Any ma-

triculate of the University, who has not graduated is entitled to associate membership, and any member, or ex-member, of the teaching or governing staff of the University is entitled to honorary membership in this association. Life membership fee is $10. Annual dues for those not life members, 50 cents. The object of this association is the promotion of the welfare of the University in any way possible and to keep the alumni in touch with their alma mater and with each other through the official organ of the association, the Minnesota Alumni Weekly; the furnishing of such specific information as may be sought by any graduate or former matriculate of the University, in connection with the University or any of its organizations; the disbursing of contributions made for specific objects connected with the University; and the maintenance of a list of the names and addresses of all graduates and former matriculates of the University. The affairs of the association are managed by a board of directors, made up of two representatives elected from each college alumni association. Each representative serving two years, their terms expiring on alternate years. The annual meetings of this association are ordinarily two—the annual business meeting held on the anniversary of the founding of the University, February 18th, and the annual picnic on alumni day of commencement week. The association employs a secretary to give his whole time to the work of the association. The officers are Henry F. Nachtrieb, '82, president, Horace Lowry, '00, vice-president, Charles F. Keyes, '96, Law '99, treasurer, and E. B. Johnson, '88, secretary.

Presidents Northrop, Folwell, Vincent

Geological and Natural History Survey of the State. While this survey is not technically a part of the University, it is so closely identified with the University departments of animal biology, botany and geology that its work is practically identified with the work of the University. To quote from the state geologist, in one of his early reports, "There is no question but one of the prime motives of the law (creating this survey) was to introduce another auxiliary force into the State university, by making it a center whence should radiate information concerning the natural features of the state, and toward which should gravitate all collections of natural history that should otherwise be brought to light." The act creating this survey was approved March 1st, 1872, and carried an appropriation of $1,000 annually for the prosecution of the work of the survey. On the 10th of the following March, 1873, an act amending the act creating the survey was passed. This act increased the annual appropriation to $2,000 and gave the regents custody and control, and power to sell certain lands granted to the state of Minnesota by the national government to aid in developing the brines of the state. See "Salt spring lands." This act also appropriated $500 for the purchase of apparatus to equip a laboratory for the survey. The regents have received cash appropriations from the state, for prosecuting the work of the survey to the amount of $50,000. The sale of salt spring lands has netted above three hundred twenty-five thousand dollars; and there are still 4625.64 acres left unsold, and, it is claimed by the regents, that 1149.4 acres are due the state from the National Government.

The geological survey was naturally the first line to be started and prosecuted with vigor and this survey was brought to such a point that the regents thought wise to discontinue further work, for the time being, December 1st, 1900.

The State Geologist has published reports as follows: Twenty-four annual reports, from 1872-98; and in addition, special and final reports as follows:

On Lake Superior region, 1866;

Final reports, six volumes: I, 697pp. 43 pl. 1872-82; II, 695pp. 42 pl. 1882-85; III, pt. 1, 1885-92; paleontology, 474pp. 41 pl.; pt. 2, 1892-96, paleontology, 607pp. 44 pt.; IV. 629pp. 31 pl. 1896-98; V, 1027pp. 6 pl. structural and petrographical geology, 1898-00; VI, geological atlas with synoptical descriptions, 88 pl.

Circulars, 1) law ordering survey; 2) relating to botanical survey; 3) museum; 4) duplicates and exchanges in museum; 6)

to builders and quarrymen; 6) hydrology and water powers; 7) distribution of specimens.

Peat for domestic fuel, 1874.

Salt spring lands due the state, 1874.

Preliminary report on building stones, clays, cements, limes, roofing and flagging, and paving stones of Minnesota.

Distribution of specimens to normal and high schools.

Bulletins: 1) history of geological surveys of Minnesota; 2) preliminary description of peridotypes, gabbros, diabases, and andesytes of Minnesota; 3) report on botanical work in Minnesota; 4) Synopsis of aphidae of Minnesota; 5) natural gas in Minnesota; 6)Iron ores of Minnesota; 7) mammals of Minnesota; 8) the anorthosytes of the Minnesota coast of Lake Superior: the laccolitic sills of the northwest coasts of Lake Superior: prefatory note on the norian of the northwest; 9) metaspermae of the Minnesota valley; 10) iron bearing rocks of the Mesabi range.

The work of the geological survey was done under the direction of Professor Newton H. Winchell who was state geologist down to 1900, when this line of work was discontinued.

The legislature of 1911 appropriated $13,000 for the ensuing biennial period to revive the work of the geological survey. Professor W. H. Emmons, head of the University department of geology, was made director, and the actual work of the survey was begun early in 1912. The work is carried along in co-operation with the U. S. Survey and in co-operation with the School of Mines experiment station and the school of chemistry. The State drainage commission is also ready to co-operate with the work of this branch. The lines of work already undertaken are, a survey of the four quadrangles in the western part of the state; Minnesota clays; Minnesota building stones; Surface formation of Minnesota, with special reference to soils; Road material of Minnesota; A relief model of Minnesota.

The State Botanist has published—Minnesota Metaspermae, 1892; Minnesota Botanical Studies, volume I, parts 1-12, 1894-08; Minnesota Plant Life, 1899; Minnesota Botanical Studies, volume 2, parts 1-6, 1898-1902; Minnesota Plant Diseases, 1905; Minnesota Botanical Studies, volume 3, parts 1-3, 1903-04; Minnesota Botanical Studies, volume 4, parts 1, 2, 1909; Minnesota Algae, 1910; Minnesota Trees and Shrubs, 1912.

Minnesota Plant Studies—Guide to the spring flowers, three editions; Guide to the trees and shrubs; Guide to the ferns and fern allies; Minnesota Mushrooms; Guide to Autumn Flowers.

The State Zoologist has published: Notes on the birds of Minnesota, 1892; Synopsis of entomostracae of Minnesota, 1895; preliminary report on the fishes of Minnesota; Collembola of Minnesota, 1903, Leeches of Minnesota, 1912.

Geology and Mineralogy Museum. This includes the Kunz collection of minerals, purchased of George F. Kunz; several suites of crystalline rocks secured from various sources; the Ward collection of casts contributed in part by citizens of Minneapolis; collections of the rocks, fossils, minerals and economic products of Minnesota; upwards of 9,000 entries gathered by the geological survey of the state; the Sardeson collection of paleozoic fossils of Minnesota, Wisconsin, Iowa and neighboring states, comprising 30,000 specimens: a series of 3,000 thin sections of typical rocks and minerals largely representing Minnesota localities; purchased material comprising a fine collection of crystals; 5,000 minerals and 3,000 specimens of economic minerals and crystalline rocks, and a collection of over 4,000 photographs and lantern slides. Located in Pillsbury hall as part of the general University museum. See also A. S. Williams collection.

George, James Woodward, clinical assistant in obstetrics 1911 to 1913.

Gerould, James Thayer, born October 3d, 1872, Goffstown, N. H. Graduate Cushing academy of Ashburnham, Mass., and Dartmouth. Assistant in Dartmouth college library, 1891-96; assistant librarian General theological seminary, 1896-97; chief of department, Columbia university library, 1897-00; librarian of the University of Missouri, 1900-1906. Librarian of the University, 1906 to date. Author of various articles upon library administration in professional journals.

Giberson, R. H., born at Cozad, Nebr.; attended Doane College at Crele, Nebr.; graduated from Nebraska state normal at Peru, Nebr., 1909; attended the University of Nebraska; taught agriculture and science in high school; animal husbandry and science at Morris school of agriculture since 1912.

Gibson, Frederic M. Professor (homeopathic) of ophthalmology, 1895-04.

Gibson, Paris, Minneapolis. Appointed regent 1871, re-appointed 1874 and 1877, resigned January 1st, 1880.

Gibson, Robert B., assistant professor of physiological chemistry 1911-12.

Gideon, Peter M. Superintendent of the Minnetonka fruit farm, 1887; originator of the Wealthy apple.

Gideon Memorial Prize Fund. The state horticultural society contributed $500 as a memorial to Peter M. Gideon, the originator of the Wealthy apple and a pioneer in developing new apple varities. The income, $25 a year, is used to provide prizes in the department of horticulture of the agricultural department. The fund was turned over to the University in 1910.

Gilbertson, A. N. Instructor in psychology, 1911-12; instructor in anthropology, 1913-.

Gifts and Benefactions. The University has received gifts and trust funds as follows: 1872, $720 from citizens of Minneapolis for the Ward casts for the museum; 1888, the Students' Christian association building costing $12,000.00; 1890, Pillsbury hall, costing $131,000.00; 1892, $1,000 for the Moses Marston scholarship in English; $5.000 from the citizens of the city for an ore crushing plant; $7,000 from the city of Minneapolis for sidewalks; 1893, small piece of land from S. H. Chute, valued at $1,500.00; 1895, $4,166.81, for the Albert Howard scholarship; 1900, the Pillsbury statue costing $15,000.00; 1901, $5,000.00 from Mrs. Mary E. Elliot, to establish a loan fund to aid needy and deserving students in the school of mines, in honor of her husband, Dr. A. F. Elliot; $5,000.00 from John D. Ludden, to be invested by the regents and the income used to aid needy and deserving students in the school of agriculture; $50,000.00 the gift of John B. Gilfillan, to be invested by the regents and the income used as a loan fund to aid needy and deserving students to secure an education at the University; 1902, the Dorr fountain, costing about $2,500.00; $8,000.00 by Mrs. Sarah Pillsbury Gale (Mrs. E. C.) the memorial fence in honor of her father, John S. Pillsbury; 1904, six lots in block 3, by the Pillsbury heirs to carry out the expressed wish of John S. Pillsbury, the lots being valued at $15,000; Alfred Fisk Pillsbury enclosed the athletic field with a brick fence at a cost of $15,000.00; Mrs. Martha Smith Cutts, (Mrs. R. E.) gave $500 to be invested and the income thereof to be used to provide a prize in surgery, in memory of her husband, Rollin E. Cutts; John D. Ludden added $5,000.00 to the amount previously contributed by him for a trusts fund for the aid of students in the school of agriculture; 1905, by the will of the late Mary E. Elliot, $114,000.00 was left to establish a hospital at the University in honor of the memory of her husband Dr. Adolphus F. Elliot; 1906, Thomas H. Shevlin, of Minneapolis, gave the University Alice Shevlin hall, at a cost of $60,000.00; the students' memorial statue was erected by subscription of private individuals aided by a $500 grant by the state and the donation of the cost of a foundation of concrete, by the University, at a cost of about $5,000.00; 1907, by the will of the late John D. Ludden, a large amount of property, exact value unknown, was added to the $10,000.00 already contributed to a trust fund to aid students in the school of agriculture; $40,000.00 was raised among the business men of Minneapolis, through the efforts of the faculty and alumni of the college of medicine and surgery, for a site for the Elliot hospital.

Thomas Shevlin added $60,000 to his previous gift—$20,000 were used to add a dining room to Shevlin Hall and $40,000 to establish four fellowships.

A contribution of $500 from citizens of Minneapolis for books for the library of the Scandinavian department was received in 1908.

In addition to all these gifts various individuals have contributed more than $10,000 to establish prizes, scholarships and fellowships of a more or less permanent nature.

Gilfillan, John B., Minneapolis. Regent 1881-1887. Born Barnet, Vt., February 11th, 1835; common schools and academic education; came to Minnesota in 1855; admitted to the bar in 1860; four times city attorney of St. Anthony, four times county attorney of Hennepin county; state senator 1876-85; congressman 1885-87; president 1st National Bank 1903-05; since 1905, chairman of the board of directors; member of the Minneapolis society of fine arts; member of the Minneapolis and LaFayette clubs. See Gilfillan trust fund.

Gilfillan Prizes. The. These prizes were established by the Honorable John B. Gilfillan, in 1894, for the best specimens of English prose divided as follows: $40, $25, $10. In 1905, these prizes were awarded to Arthur L. Helliwell, for an essay on "English Puritanism," first; McL. White, for an essay on "Social function of art," second; Edwin H. Hewitt, for an essay on "Art impulse," third. In 1896, to Edwin H. Hewitt. In 1897, first prize was not awarded. Second prize was awarded to Jessie M. Young, for an essay entitled "Grover Cleveland." Third prize went to George C. Dunlap for an essay on "Evils of the county jail system." In 1898, the first prize was awarded to Charles W. Jerome for "The monk; a parable;" second to W. M. Jerome for "Joan of Arc;" third to Hettie G. Buehler for "One of nature's gentlemen;" in 1899, the first prize was awarded to W. M. Jerome, for an essay upon "Joan of Arc," second and third places were tied between Vesta M. Cornish, with her essay upon "Abolition of war" and Harriet L. Helliwell, with her essay upon "The services of the Jesuits."

Gilfillan Trust Fund, The. The Honorable John B. Gilfillan has given to the University the sum of fifty thousand dollars, yielding an annual income of two thousand dollars, to be used by the board of regents to assist worthy students, needing such aid, to secure an education. The regents are empowered to give this aid in the way of loans or gifts, according to the circumstances of the case. As a rule the fund is used as a loan fund, and a small rate of interest is charged. The details of the regulations which have been adopted by the regents for the administration of the fund may be learned by addressing the

president of the University. 236 students have received aid from this fund.

Gilfillan, James Sterling. Clinical assistant in medicine, 1902 to ——; clinical professor to 1913; assistant professor 1913-.

Gill, James H. Instructor in iron work, 1892-01.

Gillam, Stanley Sloane, scholar in economics and political science 1912-13.

Gillette, Arthur J., clinical instructor in diseases of children, 1895-96; clinical instructor in orthopedia, 1896-97; professor of orthopedia, 1897 to 1913; professor, in charge of division 1913-.

Gillette-Herzog Prizes, The Established in 1892, by the Gillette-Herzog manufacturing company. Three cash prizes, $75, $50, $25, each accompanied by a gold medal, for the best, second best and third best, theses upon a civil, mechanical or electrical engineering subject. These prizes have been awarded as follows; 1892, first to Leo Goodkind; second to James H. Gill: in 1893, first to D. C. Washburn, for a design of a steel frame for a machine shop or iron foundry; in 1894, to A. O. Cunningham, for a design of a steel arch bridge; and second to Hattie E. Wells, for a design for wrought iron gate; in 1895, first to L. H. Chapman, for a design for a swing bridge; second to H. L. Tanner, for a design for a rotary induction motor and alternate current generator; in 1896; first to C. Paul Jones, for an original design for the steel frame of a ten-story office building; second to C. Edward Magnusson, for specifications for an electric light plant for the Gillette-Herzog company; in 1897, first to E. A. Lee, for an original design for a Bascule bridge; second to F. B. Walker and C. H. Cross, for tests of shearing strength of wire nails; in 1898, first to F. L. Tracy and W. L. Kinsell for a study of lighting trains; second to T. L. Daniels, a study of friction of shaft bearings; in 1899, first to W. P. Richardson and E. K. Hennerlund, for a thesis entitled Pressure and power required to drill sheel metal; in 1903, first to Paul I. Gunstad, for thesis, Effect of freezing on concrete, and second to M. E. Anderson and S. G. Reque, for thesis on Train lighting by electricity, and third to G. J. Houts and Jake Danner, for re-design of power plant for C. M. & St. P. Ry. shops.

Girls' Advisory Council (School of Agriculture). The organization for the self government of the young women living in the dormitories of the school of agriculture.

Girls' Home Building. Erected in 1897, at a cost of $37,000. Constructed of Milwaukee brick, 62 x 114 feet. This contains a large parlor and rooms for the preceptress, lecture room for department of home administration and dormitory rooms for

ninety students, arranged in suites of three —a common sitting room and two alcove bedrooms, for the accommodation of two students. Located at the University department of agriculture.

Girls' Mandolin Club. An organization of 1911.

Gislason, Haldor B., born August 12, 1875, Iceland; m. Bessie Mae Tucker; instructor in rhetoric and public speaking 1907 to date; B. A. '00; L. L. B. '04; two intercollegiate debates, Emerson college of oratory; member, Delta Sigma Rho.

Gist, Julian H., instructor in Rhetoric, college of agriculture, since 1913; graduate of State teachers' college, Ia.; Ph. B., Chicago; A. M., Iowa; taught Latin and English in high school and also in Bellevue College from 1909-11.

Glasoe, Paul M. Assistant in chemistry, 1895-96. Instructor in chemistry, 1898.02. Alumni Fellow, 1897-98. M. S. in 1898 for original work on the camphor group. Ph. D. '02. Sigma Xi. Later professor of chemistry and treasurer of St. Olaf College, Northfield, Minn. Later president of Spokane college, Spokane, Wash., later still returned to St. Olaf college.

Glee Club, The. Is an organization of men who associate themselves for the purpose of securing training in music and to give public concerts both in the city and in other cities near by. The members are chosen on the basis of musical ability and the club usually numbers about twenty members. Rehearsals are kept up during the college year under the direction of Professor Scott and concerts are usually given in connection with the mandolin club, which is an independent organization.

Glenn, Edwin F. Professor of military science and tactics, 1888-1891. Born in N. C., in 1857. West Point, '77. Assigned to 25th infantry in Texas. Transferred to Fort Snelling, in 1882. Promoted to first lieutenant in 1884 and assigned to Co. B. 25th infantry. Graduate in law at the University in 1891. After graduation in law he was associated with Flandreau, Squires

& McCutcheon, of St. Paul. Later, for two years, he was a member of the law firm of Stevens, O'Brien & Glenn. In 1894 he was appointed captain and acting judge advocate U. S. A., and assigned to duty at the headquarters of the department of Dakota. He had several years service in the Philippines and now holds rank as Major in U. S. A.

Glenn, W. M. Assistant in medicine, 1894-98.

Glover, A. J. Instructor in sweet-curd work, 1898-01.

Godfrey, Henry S., instructor in dentistry, 1907-10; clinical professor same to 1912; associate professor same since 1912.

Goetch, A. A., assistant in creamery, dairy school, 1911.

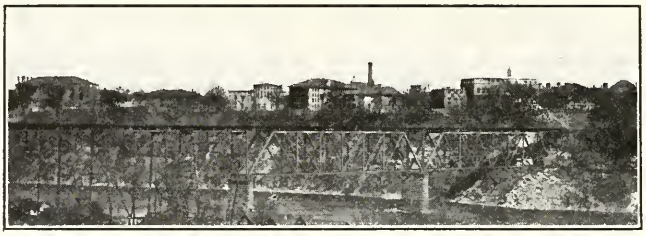
Goldsmith, Glenne W., scholar in botany, 1911-12.

elected by the club. Its purpose is to promote efficient democracy and to study current public questions. Its activities include the securing of speakers and reports at semi-monthly meetings. In 1912, under the auspices of this society, a mock political national convention was held. The society secured Dr. Charles McCarthy to speak to the students of the university upon the "Wisconsin Idea."

Goodrich, Asa F.—Professor (homeopathic) of skin and genito-urinary diseases, 1897-99.

Goodrich, Judd. Born June 3, 1869, Minneapolis, Minneapolis high school; one year academic, M. D., 1895, University. Clinical instructor in surgery to 1911, the date of his death.

Gopher, The. The custom of issuing an annual by the junior class of the university was inaugurated by the class of 1888. But



"View from Across the River"

Goldstein, Harriet Irene. Born Trufant, Mich, July 13, 1883; daughter of Samuel and Dorothy Jacobson Goldstein; assistant instructor in art 1909-12; instructor in art 1912 to date; pupil of the Art Institute of Chicago, Art Academy of Chicago, graduate of the art department of Minnesota and Northwestern Conservatory; pupil of Edgar Forkner, Martha Baker; art study in Europe, conducted private art schools at Albuquerque, N. M., for two years and in Gladstone, Mich., for one year, supervisor of drawing and industrial work, Grafton, N. D., for one year.

Goltz, Edward Vincent, clinical assistant in rhinology and laryngology, 1911-13.

Goodale, Ralph, instructor in rhetoric, 1913.

Goodale, Thomas H. ("Sid"). Mr. Goodale was placed in charge of the construction of the old main building, away back in the seventies, and it is said that this building was one of the best constructed on the campus. In later years he became demented, and spent most of his time wandering about the city telling his "story" to anyone who would listen. The campus was one of his favorite haunts, and the old gentleman, surrounded by a group of students listening to his "story," was a familiar sight on the campus for many years. Mr. Goodale died May 8, 1907.

Good Government Club was established in 1908, and has a membership of fifty men,

one annual had been issued prior to that date, that which was issued by the class of 1885. The Gopher has been issued each year since the series was started in 1888. The Gopher, in common with other annuals of similar character, deals with university life from the student standpoint. It chronicles the progress of the university and the various societies and organizations, the serious and valuable work being done by student organizations, and includes humorous hits at various members of the student body and of the university faculty.

Gopher, The, a co-educational literary society of the School of Agriculture, established December 4, 1899.

Gorman, Katherine, file clerk business office, 1913 to date.

Gould, Chester N., instructor in rhetoric, 1899-1900. Graduate of the university, class of 1899. Ph. D., Chicago, 1907.

Graduate Club. This is an organization of instructors and students in the graduate school for the purpose of fostering a greater interest in graduate work, for mutuel help, and for the discussion of topics under investigation.

Graduate School, The, gathers into a single organization and unites for the purposes of administration all the activities of the University in all its schools and colleges in so far as they relate to advanced instruction offered for the second or higher degrees, viz: Master of arts and

Doctor of philosophy conferred for advanced, non-technical study; Master of science for technical study; Master of laws. The privileges of this school are in general open to all bachelors of arts, of science, pure and applied, and of laws, from reputable colleges and universities having courses substantially equivalent to those at this University.

More or less graduate work has been provided from the very beginning of the University, and there has been an informal organization of the graduate work of the University into a graduate department, but its formal organization and recognition did not come until the meeting of the board of regents, held December 12th, 1905. Dr. Henry T. Eddy was elected dean at that time. The Graduate School embraces all the work of all departments offering graduate work and its faculty consists of all persons giving instruction to graduate students.

Following the resignation of Dean Eddy, Professor John Zeleny became acting dean for the year 1912-13. In June, 1913, Professor Guy Stanton Ford, of the department of history, was elected dean. The dean is assisted in the administration of the graduate school by an executive committee.

The only fellowships granted are the four Shevlin fellowships of $500 each and the Howard Scholarship. In many departments appointments as research assistants enable qualified students to enter the graduate school and do at least part time work toward a degree. The requirements for advanced degrees are the same as those maintained by other members of the American Association of Universities.

Graduates, School of Agriculture, 1,876; men, 1,295; women, 381. Over seventy-five per cent of the men who graduate from this school are engaged in farming.

Graham, Christopher, professor of veturinary medicine and surgery, 1892-93. Now a member of the firm of Drs. Mayo, Graham and Co., of Rochester, Minn.

Grange, E. A. A., lecturer on diseases of domestic animals, 1882-83.

Granrud, John Evenson. Born August 5, 1863, Hedemarken, Norway; son of Even O. Granrud and Karl N., nee Wasaasen; mother, Amalie O. Olsen; two sons; instructor in Latin, 1899-1903; assistant professor, 1903-09; professor of Latin since 1909; A. B., with high distinction, '86; A. M., '90, Luther College; Ph. D., with high distinction, '92, Cornell; taught at Albert Lea Lutheran academy, 1888-89; principal of Bode academy, 1899-90; professor of Latin at St. Olaf college, 1892-94; professor of Latin at Luther college, '94-'97; assistant, later instructor in Latin at Michigan, 1897-99; research work along the line of his publications, which include "Five years of Alexander Hamilton's Public Life," 1874; "Roman Constitutional History, '02; articles on Cicero in the Classical Journal; on Roman architecture in the Western Architect and the Minnesota Engineer; and on Roman Art in the Records of the Past; together with a considerable number of miscellaneous articles and reviews in newspapers and magazines; lecturer on Roman architecture, life and art; vice-president for Minnesota of the Classical Association of the Middle West and South for three years; member board of regents of the United Church, 1901-10; vice-president of same, 1913; member of American Philological Association, Archaeological Institute of America, Classical Association of the Middle West and South, Classical Club, Lambda Alpha Psi, Campus Club, Thulanian Club, Norwegian Society of Minneapolis, Minnesota Educational Association and life member Minnesota Alumni Association; United Norwegian Lutheran Church.

Grant, Dr. Richard, track coach, 1909 to date.

Grant, Ulysses S., instructor in geology, 1897-98. Graduate of the University class of 1888. Now professor of geology of Northwestern University and geologist on the United States Geological Survey.

Graves, A. R., scholar in economics and political science, 1911-12.

Graves, Charles W., bandmaster from 1893 to 1897. Enlisted in U. S. A. in 1883, made principal musician of his regiment in 1888, appointed chief musician of his regiment, the Third U. S. Infantry, in 1891.

Graves, William Grant, instructor in law, 1912-13.

Gray, John Henry. Born March 11, 1859, Charleston, Ill. Illinois State Normal, Normal, Ill.; B. A., Harvard, 1887, with special honors in political science; instructor at Harvard, three semesters, 1888-89; Harvard travelling fellowship, 1889-92; two semesters at Halle, 1889-90; seven months at Paris, 1890-91; summer semester, 1891, at Vienna; seven months, 1891-92, at Berlin; Ph. D., Halle, 1892; Professor of political science, head of the department, 1892-1907, Northwestern University, Evanston, Ill., professor of economics and political science, head of the department, University, 1907-13, professor of economics and head of the department of economics, 1913. Chairman of the World congress on political science, Columbian exposition, Chicago, 1803; chairman of municipal committee of the Civic federation of Chicago, 1894-96; first vice-president American economic association, 1897-98; expert U. S. department of labor, 1902-03, to investigate restriction of output in Great Britain; represented the U. S. commissioner of labor at the International co-operative congress, Manchester, Eng, June 1902; represented the United States at the International congress on

insurance of laboring men, Dusseldorf, Germany, June 1902; and the International congress on commerce and industry, Ostend, Belgium, August, 1902. Author of Die Stellung der Privaten Beleuchtnugsgeselschaften zu Stadt und Staat; Die Erfarung in Wien, Paris, and Massachusetts, Jena, 1893; The Facts of Municipal Ownership, being full report of National civic federation commission, about there hundred pages supplied by Dr. Gray; author of many miscellaneous articles dealing mainly with various problems relating to his specialty; editorial writer on the World Review, Chicago, for 1901-02; on leave of absence Feb. 1912-Feb. 1913, during this time member of The Council of the Department on Regulation of Interstate and Municipal Utilities of the National Civic Federation, Secretary of the Deprtment and Director of Investigation—report not yet published; various articles upon municipal ownership of public utilities corporations; public lecturer on economic subjects.

Gray, Thomas J.—Professor (homoepathic) of the principles and practice of surgery and the history and methodology of medicine, 1895-1901. Deceased.

Great American Universities — During the year 1909 Edwin E. Slosson of the New York Independent visited fifteen of the leading universities of the country and embodied the results of his investigation of these institutions in a series of fifteen articles in that publication. The articles were afterward reprinted in book form and issued by McMillan in 1910. Minnesota is given a place in this series.

Greater Campus Development Plans— In the spring of 1908 the Regents, desiring to obtain a general plan for the development of the University grounds and buildings, instituted a competition in order to select an architect to prepart a plan for such development. A prize of $1,000 was offered to the architect who would submit three plans, one showing a general plan of grounds and buildings, the second a section taken in any direction, at the option of the competitor, and the third a bird's eye perspective. Plans were submitted by some of the leading architects of the country and a commission appointed by the Regents awarded the prize to Cass Gilbert. The original plans, of course, while comprehensive were only very general and the Regents entered into negotiations with Mr. Gilbert to secure definite and workable plans for carrying out his ideas for campus development. Mr. Gilbert finally consented to do the work for $10,000. The Regents contributed $4,500 of this amount and Messrs. L. S. Gillette and F. W. Clifford contributed $5500 the balance needed. Later the Regents voted to refund this amount to Messrs. Gillette and Clifford. Detailed plans and specifications were then provided by Mr. Gilbert and on recommendation of the Board of Regents were approved and adopted in a general way by the legislature of 1909. The location of the buildings and all improvements since made on the campus have been in general compliance with the plans adopted. Reproductions of these plans will be found in this issue of the Weekly. For a full statement of details see Western Architect published early in 1909 and the supplement to the Regents' annual report of 1908.

Greek Club was established in 1900 or 1901. Its membership is from the students and instructors in the department of Greek. Its purpose is to increase interest in the work of the department and the cultivation of a spirit of good fellowship among the members of the club. Its activities include brief programs dealing with Greek literature and life. The formal programs are usually followed by a social hour.

Green, Charles Lyman. Born Sept. 21, 1862, Gray, Maine. Educated at High school, Portland, Maine; Ann Arbor, Michigan; M. D., University 1890; graduate work in London, 1890-91; Johns Hopkins, 1893; Harvard, 1894, 1895, and 1897; London, 1902;Heidelberg and Berne, 1906. Home physicians. City and county hospital, St. Paul, 1889-1890; interne, Great Ormond St. hospital, London, 1890; assistant city and county physician, St. Paul, 1891; attending physician, City and county hospital, St. Luke's hospital, St. Paul free dispensary; medical director of the Minnesota mutual life insurance company; member of the State board of health; instructor in applied anatomy, University of Minnesota, 1891-93; physical diagnosis and clinical medicine, 1893-97; clinical professor 1897-1903; professor of theory and practice of medicine, 1903 to 1907; professor and chief of the department to date; specialist, internal medicine; member of the Association of American physicians; American medical association. Author of "New Method of Controlling Pernicious Vomiting," "Widal Reaction;" "Diago Reaction;" "Early Recognition of Aneurism of the Arctic Arch;" "New Fluoroscopic and Percussion Sign of Unilateral Pleuritic Exudate." Textbooks "Medical Examination for Life Insurance and its Associated Clinical Methods;" "A Manual of Medical Diagnosis."

Green, Eugene K. Born September 12, 1870, Minneapolis, Minn. B. A. University, 1895; M. D. 1903. Principal of Lamberton, Minn., schools, 1895 to 1899. Assistant clinical instructor in medicine, 1906 to 1911; associate in anatomy to 1913.

Green, Robert O. Instructor in operative dentistry 1907 to 1913; assistant professor same, to date.

Green, Samuel B. Born September 15th, 1859, Chelsea, Mass. Public schools of Massachusetts and Massachusetts agricultural college. Nine years practical experience in nursery business, fruit, vegetable and seed growing. Professor of horticulture and forestry, 1888 to date of his death, June 11, 1910; dean of the school of forestry 1910. Author of Amateur Fruit Growing; Vegetable Gardening; Principles of American Forestry; Forestry in Minnesota; Outline for Greenhouse Laboratory Work; Course in Fruit Growing for Movable Schools of Agriculture; and various bulletins of the Minnesota experiment station. Secretary of the Minnesota state horticultural society, 1890; president of the same, 1907; member Minnesota state forestry board; member of the board of administration of state farmers' institutes.

Greenwood, W. W. Instructor in mechanical drawing, 1891-92.

Gregg, Oren C. Born November 2, 1845, Enosburg, Vt. Educated in the common schools and academic and collegiate institute of Vermont and New York. Came to Minnesota in 1865. County auditor of Lyon county for ten years. Superintendent of the Farmers' Institutes from the spring of 1885 until August 1907. Breeder of dairy cattle, Coteau Farm, Lynd, Minn. See Northwestern Agriculturist, May 11th, 1907.

Gregory, Winifred, department of loans, University Library 1910, Mines library 1911 to date.

Griffith, Charles Arthur, instructor in operative dentistry and superintendent of infirmary 1908 to 1912; assistant professor same since 1913.

Griswold, Clayton, accountant, business office, 1912 to date.

Groat, Benjamin F. Instructor in mechanics, 1898-00, instructor in mathematics and mechanics, school of mines 1900-01; assistant professor, 1901 to 1907; professor 1907-09.

Grout, Frank Fitch. Born January 24, 1880, Rockford, Ill.; son of Carl L. and Carrie L. Grout; m. May W. Browne; instructor in mineralogy 1907-10; assistant professor same 1910 to date; B. S. '04; M. S. '08; instructor at Oklahoma 1906-07; chemist for two state geological surveys and geologist for five state surveys and U. S. Geological survey; research work in properties of clay, composition of coal, petrography of Keweenawan rocks. Colorado geology, origin of ore deposits; publications along the line of research work; member Sigma Xi, Alpha Xi Zeta, American chemical society, A. A. A. S. Universalist.

Grout, George P., instructor in dairy husbandry 1908-10; assistant professor to fall of 1911.

Grover, M. D. Special lecturer, college of law, 1902-03.

Guild, Allen W. Superintendent of buildings 1893 to 1909.

Guinea Pig, The. This publication was issued by the junior classes of the college of the medical department of the University, in May 1906. It dealt with the departments which it represented in a manner somewhat after the Gopher.

Gulick, Addison, instructor in physiologic chemistry 1911-12.

Gulmon, George, assistant in dairy school 1896-97.

Guthrie, Anna Lorraine. B. A., University, 1892; reference librarian, University, 1893-1904. Editor of the Readers' Guide to Periodical Literature, since 1902; editor of the Cumulated Readers' Guide, published by the H. W. Wilson company.

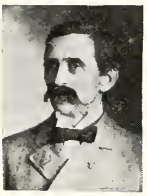
Guthrie, Francis B., agronomist of the Crookston experiment station, 1910-1911.

Haas, Edward. Assistant in technics and clinics, college of dentistry, 1895-96.

Hack, Charles W. Assistant in practical anatomy, 1897-99.

Haecker, A. L. Instructor in milk testing, '96-'97.

Haecker, H. A., instructor in dairy laboratory, 1898-99.



Haecker, Theophilus L. Born May 4, 1846, Liverpool, Ohio; German ancestry; m. Fanny Main; two sons and three daughters; chief of the division of dairy and animal husbandry and professor of same since 1893; attended the University of Wisconsin; dairy farmer; research work. Animal, nutrition in milk and meat production; author of Feeding standards, and various reports and bulletins along the line of his special investigations issued by the experiment station and in agricultural papers; has had much experience in institute work in Wisconsin and Minnesota; executive clerk in Wisconsin 1874-90; served as private in the Civil War under Burnside, Mead and Grant; member, American society for promotion of science, society for promotion of agricultural science, American society of animal nutrition.

Hagen, Paul, student assistant in dental anatomy 1911-12.

Hagerman, William Farnsworth. Born March 6, 1885, St. Paul, Minn.; English and Dutch ancestry; instructor in animal husbandry 1912 to date; graduate of high school and school of agriculture; B. S. A. '12.

Haggard, George Delaney. Born January 19, 1857, Fairport, Minn. Common and high schools, Eau Claire, Wis. Christian college, Oskaloosa, Ia., 1880; taught

three years in schools of Wisconsin and Iowa, M. D. University, 1893; assistant for three years in the department of physciology. Ten years' general experience as a machinist. Assistant in phsiology, 1903-4; instructor in physiology, 1904 to 1909.

Hagus, Dagny, clerk, business office, 1908 to 1910.

Hall, Alexander Ritchie. Born in 1874, Washington, Ont., Canada. Matriculate Ontario, Arts; M. D., C. M., McGill, 1900; M. R. C. S. Eng., L. R. C. P. Lond, 1902. Clinical instructor in medicine 1904 to 1907; instructor in medicine 1913.

Hall, Avis C., instructor in domestic art 1910-11.

Hall, Christopher Webber. Born February 28, 1845, Wardsboro, Va. Honor man, Middlebury college, 1871; M. A., same, '73; studied at Leipsig, 1875-77; principal of Glenn's Fall, N. Y., academy, 1871-72; principal of Mankato high school, 1872-73; superintendent of city schools, Owatonna, 1873-75; instructor in University, 1878-80; professor of geology, mineralogy and biology, 1880-1891; botany instead of biology, 1891-92; professor of geology and mineralogy, 1892 to date of his death May 10, 1911. Curator of the geological museum, 1889 to 1911; Dean of the college of engineering, metallurgy and the mechanics arts, 1892-97; Author of History of the University of Minnesota; Geography of Minnesota; and a large number of papers upon subjects related to his specialty. Fellow of the Geological society of America, Association of American geographers; American association for the advancement of science; president of the Geographical society of Minnesota.

Hall, Earl. Dispensary assistant, 1899.

Hall, Oscar H. Professor (homeopathic) of history and methodology of medicine, 1902-1903; associate professor of renal diseases, 1903 to 1909.

Hall, Robert Anderson. Born March 2, 1883, at Salisbury, N. C.; son of A. L. and Susan R. Mueller Hall; m. Lolabel House; one son; assistant professor pharmacology. 1913; A. B., Chicago; Ph. D., same, '07; Sigma Xi; associate professor of chemistry. University of North Carolina, later associate professor chemistry at Washington University; research work on formation of Guanidines from Isoureas; studies in Catalysis; physical properties of Aqueous solutions containing Ammonia and Citric Acid; conductivity method of repairing neutral ammonia solutions; neutral ammonium citrate, para brom isoureas; Methylene Disaicylic acid and derivatives; member American chemical society, Sigma Xi, Alpha Chi Sigma.

Hamilton, Arthur S. Born November 28, 1872, Wyoming, Iowa; father Scotch, m. Susanna P. Boyle; one mother German ancestry; son; assistant in the pathology of the nervous system, 1904-06; instructor 1906-07; instructor in same and clinical instructor in nervous and mental diseases, 1907-13; associate of nervous and mental diseases and instructor in neuropathology 1913 to date; Lennox college, Ia.; B. S., Iowa '94; M. D. Pennsylvania, '97; resident physician of Polyclinic hospital, Philadelphia, 1897; assistant physician Independence state hospital for insane 1898-04; private practice in Minneapolis since 1904; research work in insanity and in nervous diseases and in pathology; published articles connected with research work in various medical and scientific journals; member American, Minn. State, Hennepin Co. medical associations, Minnesota pathological society, Minnesota Neurological society, Chicago neurological society, American medico-psychological society.

Hamilton Club Prize, The—The University competes annually for this prize. Michigan, Minnesota, Wisconsin, Iowa, Ohio, Indiana, Northwestern, and Chicaco universities and Knox college constitute the league. Each of the colleges named submits one oration upon Alexander Hamilton or some character or event connected with his time. From the orations submitted four are chosen to be delivered before the Hamilton club of Chicago.

In the four years Minnesota has succeeded but once in winning the right to compete in the finals, Theodore Christianson representing the University, the first year, with an oration upon Patrick Henry and was given third place in the finals at Chicago, January 11th, 1905 The University dropped out of the competition until 1912, when another, but unsuccessful attempt was made to secure a place.

Hamilton, Nina Mae. Proof reader since June, 1913, office of the registrar.

Hamilton, Pearl, technician, 1913.

Hamlin, Edward O. St. Cloud. Regent February 14, 1860-March 4, 1864.

Hamlin, George B. Born February 10th, 1871, Mineapolis, Grammar and part of high school, Minneapolis; two years Colorado college; M. D. University, (hom.) 1896. Professor (hom.) pedology, 1905 to 1909.

Hamline Medical Department Merger. The board of regents took action March 4th, 1908, approving a plan by which the College of Physicians and Surgeons of the medical department of Hamline University was absorbed by the University college of medicine and surgery. For details of this action see regents minutes of that date. The substance of the plan was that members of the three lower classes of that

institution should receive instruction with the students of the college of medicine and surgery, and upon satisfactory completion of the prescribed course of study, should be granted a degree by Hamline. It was also agreed that certain members of the Hamline medical faculty should become members of the medical faculty of the University.

Hammer and Tongs. See Theta Tau.

Hammes, Ernest M., assistant in nervous and mental diseases 1913.

Hammond, Asa J. Assistant in chemistry, 1891-93; instructor, 1893-94. Graduate of the University, classes of 1891. Hom., 1896. Member of the board of directors of the General Alumni Association.

Hammond, James Felton, clinical assistant in pediatrics 1911-13.

Hand, Daniel W. Professor of surgery, 1882-1887.

Handschin, Walter F., instructor in animal husbandry 1908-10; assistant professor same to 1911.

Handy, John A. Instructor in chemistry, 1907 to 1912; instructor in pharmaceutical chemistry, to 1913. Ph. C. University 1906.

Hansen, Harold, assistant in biology 1911 to date.

Hanson, Edwin Olaf, instructor in dairy husbandry 1911.

Haralsen, Charles—Director of the fruit breeding farm near Zumbra, Lake Minnetonka, since 1907, the date of beginning of work at that station.

Harding, Everhart Percy. Born August 15, 1870, Waseca, Minn. District school; Waseca high school, 1888; B. S., University, 1894; M. S., 1895; University of Heidelberg, two years graduate work, Ph. D., 1900. Taught one year in district school; assistant in chemistry, 1894-96; instructor, 1896-99; lecturer, 1901-05; assistant professor, 1905 to 1913, associate professor same to date. Author of Chemistry of wheat; Synthesis and Reduction of Analines; Derivatives of Aldazine, Reduction Products; Synthesis and Derivatives of Hydrazines, Improved Apparatus and Modification of Drehschmidts Method for Determining Total Sulphur in Illuminating Gas; Error in Dupasquier's Method for Determining Hydrogen Sulphide in Illuminating Gas; A Quantitative Method Determining Carbon Bisulphide in a Mixture of Benzene and Carbon Bisulphide in illuminating Gas; Synthesis of 2.5 Bimethylbenzaldehyde, the Establishment of its Constitution and Preparation of Some Derivatives; Synthesis of Dimethylbenzaldazin and Salts of Derivatives, Phi Beta Kappa, Sigma Xi; Fellow A. A. A. S.

Hare, Earle Russell. Born May 26, 1872, Summerfield, Ohio; m. Maude Wilson; one son; prosetor in anatomy 1900-06; instructor in anatomy 1906-10; instructor in surgery 1910 to date; associate surgeon University hospitals; surgeon to Asbury hospital; B. A. '94, Iowa Wesleyan; M. D. Minn., '00; member Hennepin Co., Minnesota state, American medical associations, American association of anatomists; Methodist.

Harman, E. Alice, instructor in domestic science 1912-13.

Harper, David N. Chemist of the experiment station, 1888; professor of agricultural chemistry, 1890-91.

Harrington, C. D. Assistant in surgery, 1900-02.

Harrington, George Leavitt, scholar in geology and mineralogy 1912-13.

Harrington, L. P., preceptor of boys' dormitory, Crookston school of agriculture, 1908-1910.

Harrison, Lillian, assistant in domestic art, 1913.

Hartly, Carl B., expert in ecology, Geological Natural history survey, January 1st, 1908 to 1909.

Hartzell, Mary V. Student assistant in operative clinic, 1892-93; D. M. D., same title, 1893-96; instructor in operative technics 1896-97; instructor in dental anatomy, 1897-1901; instructor in comparative dental anatomy, 1901 —.

Hartzel, Thomas B. Instructor in dental anatomy and assistant in oral surgery clinic, 1892-93; D. M. D.; instructor in comparative dental anatomy, physical diagnosis, and assistant in oral surgery clinic, 1893-95; M. D.; lecturer on pathology, physical diagnosis and oral surgery, 1895-96; professor pathology and oral surgery, 1896-98; professor of pathology, therapeutics and oral surgery, 1898-05; professor of clinical pathology, therapeutics and oral surgery, 1905 to date.

Harwood, A. A., Austin. Regent, 1868 to date of resignation, February 9, 1878.

Hatch Bill. This bill was signed and became a law of the United States, March, 2, 1887. Under its provisions the University experiment station was organized and has been supported. This bill is intended solely to encourage agricultural experimentation and the University board of regents receive annually, under its terms, the sum of $15,000.

Hatch, Dr. P. L. Author of the bird book of the geological and natural history survey of the state. He was born in 1823 and died May 22, 1904, at the age of 81 years. He was at one time a prominent physician of this city, but for about twenty years before his death had resided in Los Angeles, California. His great interest in the subject caused him to be selected by Professor N. H. Winchell, when he had charge of all the work of the geo-

logical and natural history survey, to write a report on the birds of Minnesota. The report appears as volume one of the zoological series of the reports of the State geological and natural history survey and was issued in June, 1892. The volume contains 487 pages.

Hathorn, Irma. Born at Jamestown, N. D.; B. A., Minnesota; taught in high school for three years; instructor in household art and preceptress at the Morris school of agriculture since 1910.

Hauck, O. W., clinical assistant in crown and bridge work 1911-12.

Haugdahl, Samuel, instructor in cultures and starters, 1901-03.

Hause, Elizabeth, assistant in English 1909 to date.

Haviland, Willis Henry, professor (homeopathic) of mental and nervous diseases, 1889-90.

Hawley, Elizabeth McK., assistant in library 1896-1909. Now Mrs. Fred B. Chute.

Hawley, George M. B., Quiz master, college of law, 1895-06.

Hayes, George Henry. Born August, 1865, Hokah, Minn.; American ancestry; m. Jennie Stabler; one daughter; in the employ of board of control from 1900 through 1903; during the last year of his connection with that board he was in charge of the business office of the University as the representative of the board; after leaving the employ of the board of control he was in the purchasing department of the Twin City Rapid Transit company until he returned to the University as comptroller, and secretary of the board of regents in May, 1911. As comptroller he has charge of accounting, purchasing, care of buildings and grounds and the business relations of the board of regents with the board of control. He also has charge, under the direction of the president of the University and the board of regents, of the preparation and administration of the budget of the University.

Haynes, Arthur Edwin. Born May 23, 1849, Onondaga county, New York. Scientific course. Hillsdale college, subsequently studied four summers at Michigan, Harvard and Cornell. Taught five terms in village schools; five in college before graduating; nine in University summer schools; 15 years in Hillsdale college; three years in Michigan school of mines; assistant professor of mathematics, 1893 to 1896; professor of mathematics, college of engineering, 1896 to -1901; professor of engineering mathematics, 1901 to 1911. Professor emeritus to date. Contributor to the annual reports of the Society for the promotion of engineering education, also other other educational papers; Member of the Society for the promotion of engineering education; American association for the advancement of science. Phi Beta Kappa; Sigma Xi.

Haynes, Manley Hewitt, assistant in Pharmacognosy 1911-12.

Haynes Rowland. Born July 30, 1878, Worcester Mass. Public schools of Worcester; A. B. Williams 1902; 1902--06, student of Columbia university and Union theological seminary, New York City 1904-05 fellow in psychology of religion Clark university, M. A. '05; 1905-06 assistant in philosophy, Columbia university, 1902-04, coach of the Williams college debating team 1903-04, social settlement work in New York City. Instructor in psychology, 1907 to 1909; assistant professor to 1911.

Hays, Willet M., assistant in agriculture, experiment station, 1887-90; professor of theory and practice of agriculture, 1890-91. Professor of agriculture, 1893; vice chairman and agriculturist, experiment station, 1894-1904.

Haywood, George M., clinical professor of otology, rhinology and laryngology 1907 to 1909.

Head, George Douglas. Born September 19, 1870, Elgin, Minn. Fargo, N. D. high school 1888; B. S., University, 1892; M. D., 1895; graduate work at Johns Hopkins, 1897-00; graduate work in internal medicine, Vienna, 1903. Public school teacher, 1888; assistant in histology, University, 1893-95; instructor in clinical microscopy, 1896-04; professor of clinical microscopy and medicine, 1904 to 1913; associate professor of medicine 1913. Author of Protozoa in Human Disease; Experiment Demonstration in the use of Tuberculin as a Diagnostic Agent; Leucocyte Count in the Diagnosis of Abdominal Diseases; Cerebro-spinal Meningitis; Value of Newer Signs and Procedures in Diagnosis; Chlorosis, study of twenty cases; Leucocyte Count in Diagnosis of Diseases of Children; Tuberculin as a Diagnostic Agent; Leucocyte Count in Haemorrhage; A Case of Suspected Rabies with Isolation of Bac Dipth; Viena Letters; Symptomatology of Acute Nephritis; Etiological Relationship Between Cancer and Ulcer of the Stomach; Glenard's Disease, study of twenty-five cases.

Heath, Albert Cheney. Born November 10, 1868, Auburn, Maine; English ancestry; m. Ray Lamprey; two sons and one daughter; assistant in diseases of nose and throat, 1898-00; clinical professor of nose and throat to 1913. A. B., Dartmouth, '91; M. D, Minn., '94; interne C. &. C. hospital of St. Paul for fifteen months; general practice three years; practice nose and throat since 1898; graduate work in var-

ious eastern colleges and in London, Heidelberg and Paris 1905-06; member American, Minnesota State and Ramsey county medical associations, Minnesota academy of medicine, Minnesota club; Episcopalian.

Heating Plant. Completed in 1890 at a cost of $20,000 and contains the heating apparatus for all the buildings on the campus. Ceased to be used for heating plant in spring of 1913, and afterward used for storage.

Heaton Committee. This was a committee of both houses of the legislature of 1860. The report, which was printed, scored very strongly the practices of the boards of regents up to that date. The creation of the special board of three regents is doubtless due, largely, to their report.

Heatwole, Joel P., Northfield. Regent, 1891-97. Born in Waterford, Ind., in 1856. Received a common school education. Taught school, and in 1876 engaged in publishing a paper. Came to Minnesota in 1882. Elected to Congress in 1894.

Heddy, U. E., instructor in oerative technic 1907-08; crown and bridge work 1908 to 1912.

Heller, A. A. Instructor in botany, 1896-98. Graduate of Franklin and Marshall college, 1892. He became much interested in botany and spent two vacations making collections for the principal herbaria of Europe and America. Member of a government expedition to Idaho. He also went to Hawaii to study its flora. He studied at Columbia university and was a member of the Torrey botanical club and associate editor of its publications. Wrote much for the technical press upon botanical subjects.

Helliwell, Arthur L., lecturer in law, 1910 to date.

Hench, Florence B., clerk, business office, 1912 to date.

Henderson, Andrew M. Assistant in clinical medicine, 1898-04.

Henrici, Arthur T., instructor in pathology and bacteriology 1913-.

Hendricks, George A. Professor of anatomy, 1888-98, the date of his death

Herbarium. See botany museum.

Hermann, Ruth Elizabeth, scholar in biology 1911 to date.

Hermean. The second literary society of the University. Organized in 1870, disbanded in —— and reorganized in 1898 and continued in existence for five or six years. The object of this society was originally the promotion of culture and literary activity, especially oratory and debate and the cultivation of a spirit of friendship among its members.

Herrick, Carl Albert. Instructor in engineering mathematics, 1902-03; instructor in mechanical engineering 1909-11.

Herrick, Clarence L., instructor in zoology, 1883-84 Died September, 1904.

Hertz, E. Franklyn. Instructor in prosthetic dentistry, 1898-01; also in dental anatomy, 1901-02; professor of dental anatomy and prosthetic technics, 1902-07.

Hess, Ralph H., assistant professor extension work in economics and political science 1910-11.

Hewitt, Charles N. Nonresident professor of public health, 1874-1902. Born in New York in 1835. Hobart medical college, 1858. Demonstrator of anatomy while attending medical college. Practiced medicine at Geneva, N. Y. Assistant surgeon, 50th New York engineers, 1861, and surgeon, 1862. Surgeon-in-chief of Engineers' brigade, 1862-65. President of state medical society, 1865 Married April 22, 1869, to Helen Robinson. Secretary and executive officer of the Minnesota State board of health, 1872-97. Director of the Minnesota vaccine station.

Hewitt, Edwin Hawley, lecturer in architecture 1910-12; professorial lecturer same, and consulting architect board of regents, 1912 to 1913.

Hewitt, J. H., demonstrator in pathology and bacteriology 1909-10.

Hibbard. H. Wade, assistant professor of mechanical engineering 1895-98. See first edition.

Hickman, Adam C., born April, 1837, Columbia county, Ohio. Graduate of Allegheny college, Meadville, Pa.; Ohio state and union law school, Cleveland, Ohio. Thirty-three years' practice of law. Lecturer in law, 1892-94, professor pleading and practice, 1894 to 1912; professor emeritus to date; acting dean April to August, 1911.

Higbee, Albert E. Professor (homeopathic) of gynecology, 1888-94.

Higbie, Edgar C., born July 31, 1875 at Berlin, Wis.; attended Carleton college, University of Chicago, and received A. B. in education, '07, A. M., '09, Minnesota; engaged in public school work for ten years prior to graduation; superintendent of West Central school and station at Morris, Minn., since its beginning in the fall of 1909.

Higbee, Paul A. Assistant (homeopathic) in surgery, 1903-1909.

Higbie, E. C., superintendent of Morris School and Station 1910 to date.

High School Board. Act creating this board was approved March, 1878. Legally and technically this board has no connection with the University, but, owing to the fact that the president of the University of ex-officio a member of the board, it

has practically been very closely identified with the growth and development of the University. The act creating the board is to be credited directly to Dr. Folwell, who was then president of the University. The act creating the board has been amended many times but its essential features remain the same and these features are—an inspection of the schools, both high and graded, by a person appointed to that duty, or, by an examination of its pupils, or, both; by state financial aid to high school and graded schools. This act gave Minnesota one of the best school systems in the country. It unified and simplified and so made more efficient the whole system from the kindergarten to the University.

Higley, Merle. Record clerk, office of the registrar since August 1912. B. A. 1911.

Hildebrandt, Henry A., superintendent of grounds and buildings since the summer of 1910. E. E., Minn., 1899. Between the time of his graduation and his election to the superintendency of grounds and buildings, Mr. Hildebrandt had been engaged in practical work in the line of his profession.

Hill, Miss. Conducted a private school in the old academy building in 1856.

Hill, Hibbert Winslow, born September 16, 1871, St. Johns, N. B. Collegiate Institute, Woodstock, Ont. M. D., University of Toronto, 1893; M. D. 1899; Johns Hopkins, graduate work, 1895; special work, 1898; George Brown scholar, 1893-94; Starr Gold medal, 1899. Taught in private school; demonstrator of clinical chemistry and pathology and bacteriology, Toronto, 1893-96; instructor in bacteriology, Harvard Medical School, 1903-05; assistant professor of bacteriology, University 1895 to date. First assistant bacteriologist, Louisville Water Filtration Experts, 1896; acting first assistant Philadelphia board of health laboratory, 1896; biologist, director and chief of bureau, Brooklyn, N. Y., watershed laboratory, 1896-98; director of Boston board of health laboratory, 1898-1905. Assistant director of the state board of health of Minnesota, 1905-1909; epidemiologist 1909 to date; assistant professor of bacteriology, 1905 to 1913. Author of papers on pathology, on morphology of bacteria; on various public health problems; on technique; annual reports of various laboratories, about forty to fifty in all. Managing editor, now associate editor American Journal of Public Hygiene, 1903 to date. Member and chairman of various committees on public health subjects; vice-chairman and chairman of the laboratory section of the American Public Health Association; charter member Society of American Bacteriologists; American association of Pathologists and Bacteriologists; laboratory section of the A. P. H. A.; Fellow of the Massachusetts Medical Society. Nu Sigma Nu; Sigma Xi.

Hillesheim, Catherine, instructor in animal biology, 1902-03.

Hillman, Ada B., second general secretary of the University Y. W. C. A., 1899-03, and 1906-07. Now secretary of the city association of Tacoma, Wash.

Hilton, William Atwood, instructor in histology and embryology 1911-12; assistant professor same 1912-13.

Him that overcometh. A noteworthy sermon delivered before the students of the University by the Reverend John Walker Powell, '93, March 12, 1911. Printed in the Minnesota Alumni Weekly of March 27, 1911.

Hinckley, T. L., instructor in civil engineering 1907-08.

Hinton, Charles H. He was appointed assistant professor of mathematics at the University in 1897 and resigned three years later. At the time of her death, April 1907, he was employed in the patent office at Washington, D. C. See first edition.

Hirschfelder, Arthur Douglass. Born September 29, 1879, at San Francisco, Cal.; German Hebrew ancestry; m. May Rosalie Hirschfelder; one daughter and one son; professor of pharmacology and director of the pharmacological laboratory, 1913; B. S., California, '97; M. D., Johns Hopkins, '03; student at Paris, '98, Heidelberg, '99, and Berlin, '06; assistant in medicine, Cooper medical college, 1904-05; voluntary assistant instructor and associate in medicine, Johns Hopkins, 1905-13; research work and publications upon pathological and clinical physiology of the heart; chemical aspects of pellagra and pepton poisoning; effect of drugs in experimental pneumonia, also Diseases of the heart and Aorta, Lippincott, Philadelphia, 1st edition, 1910, second edition, 1913; member American Physiological society, American pharmacological society, American Physiological society, American pharmacological society, American medical association, fellow American association for the Advancement of Science; society for experimental biology and medicine; international medical congress.

History of Medical Education in Minnesota. See The Unification of Medical Teaching in the State of Minnesota," a pamphlet containing a full report of a celebration held in the University chapel on the evening of December 8th, 1908. The paper by Dr. Beard, in this pamphlet, is a very complete and reliable history.

History of the University. A pamphlet containing a full report of an address made by John S. Pillsbury, president of the board of regents, June 1, 1893, before the alumni of the University at their annual dinner at the West hotel. Contains much valuable material.

A pamphlet containing an address delivered before the state historical society

December 11, 1905, by Honorable John B. Gilfillan, at one time a regent of the University. 46p. and cover. Contains much valuable data.

Article by Professor Willis M. West in the Northland Magazine, July-August, 1898.

The report of the board of regents made to the legislature in 1861, contains a very full and careful review of the history of the University down to that date.

"An historical sketch," by Professor C. W. Hall, Gopher of 1897, pp. 11-88.

"A leaf from the past," by Dr. Folwell, Gopher 1895, pp. 15-19.

See Forty Years of the University of Minnesota.

Hoag, William R. See first edition.

Hoagland, Ralph, professor of chemistry 1909-13.

Hobart, L. R., assistant in dairy school 1898-99.

Hobbs, Fred E., instructor in moot court practice, 1902-03; justice and moot court practice, 1903-1911. Graduate of the University, class of 1888, and law '92.

Hodnefield, Jacob, assistant in the loans department. University library, 1905 to 1909.

Hoff, P. A., assistant in clinical medicine, 1901-05; clinical instructor in medicine, 1905 to date.

Hollinshead, Mrs. Lillian Bauer. Born January 20, 1879, Kilborn, Wis.; German ancestry; instructor in farm accounts school of agriculture 1909 to 1913, graduate Milwaukee, Wis., normal '97; Presbyterian.

Holm, John G., instructor in rhetoric, 1904-05. Graduate of the University, class of 1904. Since engaged in newspaper work.

Holman, William Frank. Born Friend, Nebr.; American ancestry; wife deceased; instructor in physics 1909-11; instructor in mathematics and mechanics 1911 to date; B. S. C., Nebr., '04; M. A., Nebr. '06; Ph. D., Goettingen, '08; instructor in Worcester Polytic 1908-09; practical experience as structural engineer; research work, Fatigue and recovery of the Photo-electric current, member Sigma Xi.

Holmes, Charles J., clerk, purchasing department, 1912 to date.

Holstrom, Alma N., stenographer, business office, 1911 to date.

Holt, Charles Mead. Born at Epping, N. H., October 5th, 1867; son of John H. and Mary D. Holt; m. Lulu M. Pike; scholar in pedagogy, 1902-05; instructor in college of education, 1905—; instructor in technique of reading and voice culture to date; has charge of training the members of the dramatic club for the plays presented by the club; spent two years at the University of Michigan, and four years at Emerson college of oratory, Boston, Mass., completing a graduate course; A. B., Minnesota, '05; one of the owners and directors of the Minneapolis School of Music, Oratory and Dramatic Art; member Minneapolis Commercial and the University clubs.

Holtquist, Arthur C., clerk, business office, 1911 to 1912.

Home Building. The first school building erected for the school of agriculture. It contains accommodations for twenty-four students. The building is 60x70 feet,

two stories and basement. It was erected in 1887, at a cost of $18,000. This building is used for a boys' dormitory, classrooms, and headquarters for the Young Men's Christian Association.

Home Economics Association. An organization including all women in the college of agriculture. It was organized in 1909 and has as its object the promotion of the common interests of the young women pursuing work in home economics.

Home Economics Building. The legislature of 1913 appropriated $75,000 for a home economics building to be erected upon the campus of the department of agriculture.

Home Economics Building. This building was erected in 1890, at a cost of $6,500, from the profits on the sale of the first University farm and is used by the department of home economics.

Home Economics Club. This club became Phi Upsilon Omicron in 1910.

Homeopathic Medicine and Surgery, The College of. For general statement of the organization and history of the department of medicine see statement under the college of medicine and surgery.

This college is the direct and lineal descendant of the Minnesota homeopathic medical college which was established in 1886. The old college ceased to exist and the new one came into existence by the acceptance, by the board of regents of the University, of the proposition of the trustees of the Minnesota college, to surrender the charter of that institution and to become merged in the department of medicine which was then being formed. The college faculty was appointed in the spring of 1888 and instruction was begun in the fall, with Dr. H. W. Brazie, as secretary of the faculty and Dr. Perry H. Millard,

as dean of the department. In the fall of 1892, this college, together with the others, constituting the department removed to the University campus, the work having been previously conducted in the building now occupied by the Asbury hospital, on the corner of Ninth avenue south and Sixth street. With the removal to the campus, this college was made more independent in the government of its affairs and Dr. Brazie was made dean. The work was carried along without special incident until 1893, when Dr. Alonzo P. Williamson became dean, in place of Dr. Brazie, resigned. Dr. Williamson continued as dean until 1903, when he resigned and Dr. Eugene L. Mann was elected in his place. The college, as first organized, provided a course of three years, which was increased to a four-year course in 1895. This college increased its entrance requirements, at various times, until it finally required two full years of college work for admission. In 1903, the attendance fell off so that a proposition was made to abolish the college altogether, providing for the work of the college by the creation of two professorships, one in the homeopathic materia medica and one in therapeutics. The movement failed and the college continued as it had before, to furnish a full college course in homeopathic medicine and surgery. The work in anatomy, physiology, histology, chemistry and bacteriology being pursued in common with the other students of the department. The legislature of 1900 appropriated $50,000 for a building for this college. The Regents declined to erect the building and voted, at the May meeting of the same year, to abolish the college. At the same time the Regents created a chair of homeopathic materia medica and another of homeopathic therapeutics, making these courses optional to any student in the college of medicine and surgery. There being no demand for this work these chairs were afterward, in 1911, abolished. During the course of its existence this college graduated 78 men and 15 women.

Honorary Fraternities. Local, Pi Beta Nu (extinct), Pi Sigma (extinct), Grey Friars, Iron Wedge, Phi Beta Kappa, Sigma Xi, Phi Lambda Upsilon, Lambda Alpha Psi, Delta Sigma Rho, Tau Beta Pi, Mu Phi Delta, Scabbard and Blade, Sigma Delta Psi.

Horning, D. W. Associate professor (homeopathic) of diseases of heart and lungs, and clinical medicine and physical diagnosis, 1903 to 1909.

Horrigan, Neil B., bookkeeper, business office, 1913 to date.

Horticultural Building. Erected in 1899, at a cost of $35,000. It contains the office and recitation rooms of the horticulturist and the department of physics and botany, and a large room specially arranged for classes in sewing and dressmaking. Connected with this building are extensive rooms under glass for winter plant propagation, experiment and demonstration work in classes. The building proper is 50x80, of red pressed brick and stone,

with greenhouse of about 4,400 square feet, a laboratory 26x50 feet and a machine shed, 20x90 feet. This building also provides quarters for the college of forestry.

Horton, T. G., station photographer 1910 to date.

Hoskins, Elmer Ray, assistant demonstrator in anatomy 1912-13.

Hoskins, Horace Preston. Born January 3, 1886, Philadelphia, Pa.; son of W. Horace and Annie Evans Cheever Hoskins; m. Anna M. Smith; assistant in veterinary science 1911-12; instructor 1912 to date; V. M. D. Pensylvania, '10; won J. P. Lippincott prize for highest general average during course; engaged in general practice from 1910-11 in Philadelphia; assistant in laboratory of Pennsylvania state livestock sanitary board 1909-10; research work in ventilation experiments and hog cholera investigations; published various scientific and popular articles in veterinary and agricultural periodicals; member American veterinary medical association, U. S. Livestock sanitary association, Minnesota state veterinary medical association, Pennsylvania state veterinary medical association, associate member of the Keystone veterinary medical association, Alpha Psi; Presbyterian.

Hospital Outpatient Service Building is located at 1810 Washington Avenue south, just across the river from the University campus. It was erected in 1899 at a cost of $15,000, and has since been enlarged and re-equipped. It is a two-story brick building 40x150 feet. It contains rooms for the examination and treatment of patients in every department of medicine, laboratories, drug-room and store rooms. It draws patients not only from the immediate neighborhood, which is thickly settled, but from all quarters of the city. Its clinics are crowded to congestion, 11,501 new patients and 40,457 visits having been recorded in the past year. It extends its usefulness, by an externe corps, to the homes of the city's poor and maintains a large obstetrical service.

Hospitals.—In the past the several public and private hospitals of the Twin Cities have generously welcomed to their wards and amphitheatres the clinicians and students of The Medical School; but with the attainment of The University Hospitals, owned and controlled by the State, the school is able to confine its clinics to its own field and to the City hospital of Minneapolis, and the City and County hospital of St. Paul.

The Minneapolis City hospital has a present capacity of 360 and a projected capacity of 700 beds. It has a large pavilion for contagious diseases, in general, while Hopewell hospital, on the outskirts of the city, is devoted, with its 120 beds, to the care of tuberculous patients. The authorities have recently entered into an arrangement with the University by which one-half of the City hospital patients, throughout the entire year, are placed in the care of a staff nominated by the medical school, which becomes responsible for their treatment and conducts the teaching clinics.

Negotiations are pending for a similar University service at the City and County hospital, in St. Paul. This, the largest institution of its kind in the Northwest, has 616 beds. Its present staff includes members of the faculty of the medical school and its clinics are open to students. The orthopedic department is in charge of the professor of orthopedic surgery in this school.

Hospital Service Building. The legislature of 1913 provided $50,000 for the construction of a hospital service building which is to be erected just west of Elliot memorial hospital and connected with it by a covered passage.

Houck, Stanley B., special instructor in business law, extension division, 1913.

Hough, W. S., assistant professor of philosophy 1889-91, professor of philosophy 1891-94.

Hovda, Olaf, instructor in engineering mathematics, 1906 to 1909; instructor in physics to 1912.

Hoverstad, Torger A., superintendent of the sub-station at Crookston, 1896-1906.

Hoversten, Albert, farmer at Waseca station since 1913; graduate of school of agriculture and Luther College, Jewel, Ia.

Hovey, A. P., scholar in political science and economics 1910-11.

Hovey, Frances, instructor in Crookston school agriculture 1912 to date.

Hovland, Henry B., Duluth, appointed to the board of regents on the expiration of the term of Mr. J. T. Wyman. Resigned the office in December, 1912.

How, Jared, lecturer on landlord and tenant, 1898-07; special lecturer, same, 1907 to 1912.

Howard, Charles W., born February 22, 1882, Ogdensburg, N. Y.; American ancestry; m. Anne B. Townsend; one son and one daughter; instructor in division of entomology, college of agriculture, 1912-13, assistant professor to date; Cornell, '04; assistant division of entomology, Transvaal department of agriculture, 1905-06; chief of same, 1906-08; chief of section of entomology, department of agriculture of Mocambique, East Africa, 1908-11; assistant Rockefeller Institute for medical research, New York, 1911; research work, Ixodidae, insect transmission of infantile paralysis, parasites and parasitic insects and relation of insects to animal and human disease in general; numerous publications in various scientific papers; member Royal society of South Africa, Transvaal biological society, fellow entomological society of London, member South African ornithological union, Sigma Xi, A. A. A. S., association of economic entomologists; Friend.

Howard, Seth E., assistant in clinical medicine, 1897-98.

Howell, Daniel B. Born July 1st, 1878, Dousman, Wis. Ph. B., University of Wisconsin. Two years' experience as principal of a graded school. Instructor in mathematics, school of agriculture, 1905 to 1910.

Hoyt, Samuel L., born May 29, 1888, in Minneapolis; Scotch and Dutch ancestry; m. Jane Douglas Woodruff; assistant professor of metallography, 1913; Engineer of Mines, '09, Minnesota; two years of graduate work at Columbia University; two years of graduate work in the Royal School of Technology, Charlottenburg, Germany; research work in metallography on iron and steel and brasses and bronzes; published, "The Copper-rich Ternary Alloys of Copper, Tin and Zinc," Journal of the Institute of Metals, No. 2, 1913; Ghent meeting; member Delta Tau Delta and Sigma Rho.

Hubbard, Lucius F., St. Paul., regent ex-officio, as governor of the state, 1881-87.

Huenkens, Edgar John, clinical assistant in medicine 1910 to 1913; instructor in same 1913.

Huff, Ned L. Born September 21, 1878, Pendleton county, Ky. Little Falls high school, 1897; B. A., University, 1903; M. A., 1906. Taught in district school, 1897-99; science in Fergus Falls high school, 1903-05; instructor in botany, 1906 to 1907; assistant professor same to date. Assistant on botanical survey of Minnesota, 1899-03.

Huggins, Major E. L., professor of military science and tactics 1873-75. See first edition.

Hughes, Percy, instructor in philosophy 1904-06.

Hull, Blanche, registrar's office, assistant, 1907-1909. B. A., University, 1904. Mrs. C. A. Savage.

Hummel, John A. Born June 12, 1875, Cottage Grove, Minn. Hastings high school; University school of agriculture; B. Ag., '99. Assistant chemist and instructor in agricultural chemistry, 1900-07; as-

sistant professor of agricultural chemistry, 1907 to 1909. Member of the board of directors of the General alumni association.

Hungerford, DeForest. Born in 1887 at Randolph, Kansas; English, German and Swiss ancestry; graduate assistant and instructor in chemistry 1912 to date; Kansas Agr. College, '10, B. S.; research work, investigation of Minnesota peat soils; member American Chemical society, American Society of Agronomy, Alpha Chi Sigma; Methodist.

Hunter, Charles H. Born February 6, 1853, Clinton, Maine. Graduate of Bowdoin. Professor of clinical medicine, 1888 to 1912. Author of many medical papers. Member of the State medical society; Academy of medicine; American medical association, etc.

Hunter, William Hammett, instructor in chemistry 1909 to 1912; assistant professor to date.

Huntington, E. C., editor in the department of agriculture 1910-11.

Hurd, Anna H., lecturer (homeopathic) on diseases of the blood and ductless glands, 1903 to 1909.

Hurd, Ethel S., assistant (homeopathic) in ophthalmology, 1903-04; lecturer on electro-therapeutics, 1904 to 1909.

Hutchings, Albert Leonard, instructor in animal husbandry 1910 to 1912.

Hutchinson, Henry, professor of theory and pracice of (homoepathic) medicine, 1888-94.

Hutchinson, John Corrin. Born May 11, 1849, Kirk Michael, Isle of Man, Great Britain. Came to the United States in 1867, with his mother after the death of his father. Educated at Peel, Isle of Man; preparatory department of the University; B. A., 1876; tutor in Greek, 1873-76; instructor in Greek and Latin 1876-78; instructor in Greek and mathematics, 1879-82; associate professor of Greek and mathematics, 1882-90; professor of Greek language and literature since 1891. Member of the American philological association; National educational association; Classical association of the middle west and south; Psi Upsilon; Phi Beta Kappa.

Hyde, Sophia, head of order department, University library, 1911 to date.

Hynes, John Eldon. Born July 25, 1878, Winnebago, Minn.; m. Martha F. Harris; one son and one daughter; Ph. C. '00; M. D. '04; interne St. Luke's hospital one year; assistant in medicine 1905 ——; clinical instructor in medicine and assistant in clinical microscopy to 1913; instructor in medicine, 1913; member American, Minnesota state, and Hennepin Co. medical associations, Minnesota pathological society, University club, St. Anthony Commercial club, Campus club; Episcopalian; clinical instructor in medicine and assistant in clinical microscopy to 1913; instructor in medicine 1913.

Inaugural Occasions—For a report of the inauguration of Dr. William Watts Folwell, as first president of the University, see city dailies of December 22, 1869. The exercises took place in a large room on the 3rd floor of the west wing of the Old Main. The address, in full, will be found in a volume of University addresses, published by the H. W. Wilson Co., in 1909.

The inauguration of Cyrus Northrop, second president of the University, took place in the Coliseum, June 10th, 1885. A full report of the proceedings was published in pamphlet form by the University.

The inauguration of George Edgar Vincent, third president of the University, took place in the University Armory October 17th, 1911. For full report see Minnesota Alumni Weekly of October 18, 1911.

Indoor Athletic Meet. This meet has been an annual affair since 1898.

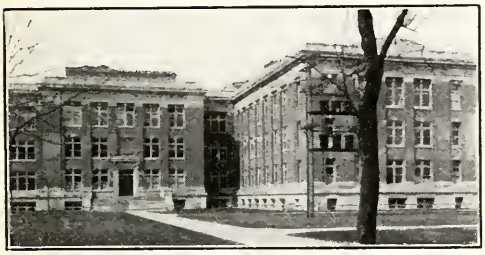
Industrial Contests, Rural School Work. Since 1910 two men have given the greater part of their time to the organization of industrial contests in rural schools in Minnesota. These contests have been conducted in about 40 counties and approximately 15,000 boys and girls have taken part in the various contests. The contests include sewing, baking, manual training, and the growing of grain, corn, and vegetables. An acre-yield contest with about 1,300 competitors was organized. In co-operation with the St. Paul Dispatch an acre-yield potato contest was conducted in ten counties with 1,000 boys and girls participating. In co-operation with the Minneapolis Tribune a similar contest in tomato growing and canning was carried through in eleven different localities, enlisting the interest of more than 1,000 girls. An important feature of the industrial contests has been the introduction of prizes for booklets prepared in rural schools on selected agricultural topics. The extension division is also to be credited with inaugurating the plan of providing warm lunches for those who attend rural schools. This plan has been adopted by a number of rural schools, and offers an opportunity for elementary instruction in domestic science. More than twenty schools report very satisfactory results.

Influence of organized alumni on American colleges. Article reprinted from the reports of the Carnegie Foundation in the Minnesota Alumni Weekly of May 6th, 1912.

Ingbert, C. E., associate in neurology 1907-08.

In Memoriam. A pamphlet of forty pages and cover, containing the addresses made on commencement day, June 5, 1902, in honor of John S. Pillsbury, "Father of the University."

Institute of Anatomy is one of the two new laboratory buildings devoted to medical teaching. It provides quarters for the departments of anatomy and obstetrics. It was completed so far as to permit of its occupancy in the fall of 1912, but its equipment is not yet fully finished. The appropriations for this and its sister building, The New Millard Hall, were made by the legislatures of 1909 and 1911. The cost of construction has been $243,000, and the equipment will aggregate $67,000. The building has a sub-basement in which the machinery of refrigeration and cold storage is housed; a basement in which a



modern system of mechanical ventilation and air filtration is placed and where store-rooms, preparation-rooms, etc., are provided; and three main stories devoted to laboratories, class-rooms and research rooms. A bay, extending to the basement and first floor, provides for a large and well-lighted auditorium, designed to seat some 225 persons. A roof-house partially covers the upper floor slab, in which further ventilating machinery, animal enclosures, etc., are placed. The building has a floor area of 63,136 square feet. It is, perhaps, as complete a laboratory building of its type as may be found in America.

Institute of Public Health and Pathology is situated on the old campus and is one building remaining there that is devoted to medical teaching. It was built in 1906-'07, at a cost of $100,000, with 60x100 feet, with north and south wings 56x75 feet each.

In the south wing the laboratory and epidemiological divisions of the State Board of Health are housed. A suite of rooms is devoted to the Pasteur Institute, in which researches in rabies are pursued and a special treatment of patients bitten by rabid animals is undertaken. Diagnostic laboratories are provided for the bacteriological, chemical and pathological work of the State Board of Health. Research laboratories for members of the medical faculty, offices for the clerical force, vaults for records, unpacking, shipping, storage, washing and media rooms also occupy this wing.

The remainder of the building provides for teaching and research work in the University departments of pathology, bacteriology and public health.

The central portion of the building, three stories in front and four in the rear, has a part of three stories devoted to museum and library purposes. In a three-deck room, the department library and a large collection of pathological and bacteriological specimens are available to faculty and students. On the first floor is a preparation room immediately beneath the museum and adjacent to the amphitheatre and autopsy room. Six special laboratories and offices are provided on this floor for members of the staff. The remainder of the central body of the building is occupied by the amphitheatre, fitted for lectures, projection work, and the conduct of autopsies, and by special research laboratories, photographic rooms, and a cold storage plant.

In the north wing the main teaching laboratory occupies a floor space 75x56 feet, lighted on three sides and by sky-light, divided by means of low partitions and 12 loges, each devoted to the use of a group of students. Each loge is equipped with apparatus and supplies for practical work in pathology, bacteriology and public health. On the floor below is a student's

added appropriations of $25,000 for the University, and $5,000 for the State Board of Health equipment. The building, which is 213 feet over all and 100 feet deep in its central portion, consists of a main body

research laboratory, containing 6 loges, used for the teaching of special courses in pathology of tumors, neuro-pathology, practical sanitation, etc. Other special laboratories, rooms for the preparation

and storage of media, and of stock cultures, together with janitor's quarters, are situated in this wing.

Integral Club. An organization of engineering alumni of Minneapolis. Founded in 1911-12.

Intercollegiate Conference Athletic Association. This conference, which includes the Universities of Chicago, Illinois, Michigan, Minnesota, Northwestern, Purdue, Wisconsin, Indiana, and Iowa, grew out of a meeting of the presidents of seven universities of the Middle West, held in Chicago, on January 11, 1895, for the purpose of considering the regulation of intercollegiate athletics. The first meeting of the present Conference was held February 8, 1896. At that time it included all the universities named above except Iowa and Indiana which were afterwards admitted. Michigan withdrew from the Conference January 14, 1903, and Ohio State University was admitted to the Conference in 1912.

The Conference has no written constitution, but is governed by precedent and by various rules and resolutions passed from time to time. The annual meeting is held in Chicago at the close of Thanksgiving week, and other meetings are called from time to time.

A majority vote of the representatives is sufficient to pass any measure. All measures must be submitted to the faculties of the constituent members for approval. If any faculty rejects any measure within sixty days, that measure must be reconsidered at the next meeting of the Conference. If it again passes by a majority vote it becomes a Conference rule, nonobservance of which results in suspension of the institution failing to observe the rule.

The Conference has three standing committees, on eligibility, on colleges, and on officials. See Conference Code, published by the Intercollegiate Conference Athletic Association in 1912.

Inter Fraternity Council. The Inter Fraternity Council is the outgrowth of a feeling that certain evils had grown up around fraternity life in the institution and that these evils ought to be eradicated by the fraternities themselves. A committee was appointed by President Northrop which made a report which was printed in full in the Minnesota Alumni Weekly of October 29, 1909. This report embodied the conclusions of the committee after visiting several leading western institutions and studying the fraternity question at those institutions. The evils were reported under three heads—low scholarship, excess of social indulgence, lack of democratic spirit and healthy interest in University affairs. The committee reported a form of inter-fraternity organization which should be binding upon all fraternities. The fraternities agreed to this with the proviso that the regents should demand that all fraternities live up to the constitution which was adopted in February, 1910. The organization has been maintained and definite and persistent effort has been made to improve fraternity conditions at the University. The latest report of the president of the council, who is a member of the faculty and whose election must be approved by the board of regents, indicates that substantial progress has been made and that conditions are not only improved but are still improving. See report published in President's report of 1911-12.

Inter-Society Debates. The action of the federated literary societies, in 1896, looking toward better provision and support for intercollegiate and intersociety debate, resulted in the formation of the league of the five members of the federated societies, which then included the Forum, Delta Sigma, Minerva, Law Literary and Shakopean. In 1897, the Castalians came into the league and Minerva won the championship, having defeated the Delta Sigmas and Castalians. In 1898, Minerva dropped out and Kent came into the league, and won the championship. In 1899, Minerva came back and the Hermean was also admitted, and this year the Shakopeans and Kents proved to be the leaders. In 1900, Blackstones came into the league and in the finals the Shakopeans won from th Forums and so held the championship. In 1901, the same teams competed as in 1900 and the Forums lead with Minerva a close second in the finals. In 1902, the Law Literary society fought its way to victory in the finals, defeating the Kents, the Minervas and Castalians. In 1903 by the Shakopeans; in 1904, by the Shakopeans; in 1905, by the Forum; in 1906, by the Forums; in 1907, by the Law Literaries. In this contest the Minervas were in the finals.

The victories of later years have gone as follows: 1908, Shakopeans; 1909, Shakopeans; 1910, Castalians; 1911, Forums; 1912, Forums; 1913, Forums—won for the third successive time and so secured permanent possession of the Jacobs cup.

Iowa-Minnesota League, The, included the two universities named and for many years held an annual contest in debate. Dissolved in 1906 upon the organization of the Central debating circuit of America.

Iron Wedge. An organization of senior men chosen on merit. Its object is to promote the highest interests of the student body at Minnesota. Organized in 1913.

Irvine, Harry Garfield. Born October 16, 1881, Portland, Me.; Scotch ancestry; m. Etta J. McCabe; one daughter; clinical assistant in dermatology; instructor in dermatology and syphilis from 1912-13; instructor in dermatology 1913; M. D. '03; general practice 1903-07; specialist in skin and genito-urinary diseases since 1907; graduate work at Vienna summer of 1911, with one month in London; publications, discussion of special cases and subjects related to speciality; deputy coroner of Hennepin Co. 1900-06; member Hennepin

Co., Minnesota state and American medical associations, Minnesota pathological association, Chicago dermatological association.

Itasca Forestry Experiment Station. This station was established in accordance with law which required the co-operation of the state forestry board with the University college of forestry. The University owns no land at this place, but has fourteen buildings located on the Itasca forest reserve. These buildings are all log buildings and were constructed by the men and boys connected with the forestry school and are worth many times what they cost. The total expense of the buildings was $5,125. The buildings include four cottages with a large bunk house, a dining hall, a library, a lecture hall, kitchen, ice, boat and pump houses, barn and shops. This station is utilized chiefly in connection with a summer course in the college of forestry and the experimental work is carried on in co-operation with the state forestry board. Junior students in the college of forestry are required to spend the summer following their junior year at this station, where they are given practical field work to supplement the theoretical work of the classroom.

Jackson, Anson B. Born February 17, 1850, Brooklyn, N. Y. B. A., Hobart, '70; LL. B., Columbia, '73; practicing lawyer in Minneapolis since 1879. Special lecturer on conflict of laws, college of law, 1907 to 1912.

Jackson, Clarence Martin. Born April 12, 1875, at What Cheer, Ia.; professor of anatomy and director of department since 1913; fellow, Missouri, 1897-99; B. S., '98; M. S., '99; M. D., '00; graduate work at Leipzig, 1903-4; Berlin 1904; instructor in anatomy, Missouri, 1899-00; assistant professor in charge of anatomy and histology, 1900-02; professor '02; dean of medical school, 1909-13; research work in comparative anatomy and histology of vertebrates; human topographic anatomy and embryology; member ed. board, "Anat. Record." M. A. A.; Ass. Anat.; Am. Med. Ass.; Anat. Gesell.

Jacobs Cup, The. This cup is the property of the Minnesota debating association and was presented to it by S. Jacobs & Company, Jewelers, to be awarded to the winner of the inter-society series of debates each year. It is provided that any society which wins this cup, three times in succession, shall become its permanent owner. Twice has it been won two years in succession, by the Shakopeans in 1903-4, and by the Forums in 1904-5. The cup was first won by the Shakopeans in 1900.

Final possession of the Jacobs cup was won by the Forum Literary society in 1913, having won for the third successive year temporary possession of the same. The final debate was won against the Athenian Literary society of the college of agriculture.

Jaggard, Edwin Ames. Born June 21, 1859, Altoona, Pa. Prepared for college at Stewart and Hollidaysburg, Pa.; A. B., Dickinson, Carlisle, Pa.; '79; A. M., idem, 1882; LL. B., University of Pennsylvania, 1882; LL. D. idem., 1906; 1886, lecturer on medical jurisprudence, St. Paul medical college. University lecturer on taxation and torts, 1891-95; professor of torts and criminal law, 1895-96; lecturer on taxation and torts, 1896-97; torts and criminal law, 1897-98; professor of taxation and modern phases of law of torts, 1899-1900; professor of torts, 1900-01; professor of taxation, 1901 to 1911. Justice of the supreme court of Minnesota, 1905 to date of his death, February 13, 1911. Author of Jaggard on Torts, 2 vols.; Jaggard on Taxation, Minnesota, 1 Vol., Iowa 1 Vol.; An article in Cyclopedia of Law and Practice, on False Imprisonment and Malicious Prosecution.

James, Eldon Revare. Born November 21, 1875, at Newport, Kentucky; father English and mother American ancestry; m. Phila W. Smith; professor of law, 1913; B. S., '96, and LL. B., '99, Cincinnati; S. J. D. Harvard, '12; instructor and professor of law, Cincinnati law school 1900-12; professor of law, Wisconsin, 1912-13; practiced law in Cincinnati, Ohio, 1899-1911; Presbyterian.

James, George Francis. Born August 18, 1867, Normal, Ill.; Welch, Scotch, French ancestry; m. Pauline Ten Eyck Sholes; three daughters and one son; professor of education 1902 to date; dean of the college of education since 1905; B. A., Mich., '86; M. A., '87; University of Halle, Ph. D., '94; has had teaching experience in high and normal schools, normal college and University; University extension secretary 1891-93; secretary of Chicago educational commission and has held similar positions in other cities; author and editor of several volumes of a technical and general nature and miscellaneous addresses; member Phi Beta Kappa, Phi Kappa Psi, Minnesota educational association, National education association, National society of college teachers of education; Methodist.

Japanese Exchange Lectureship. In 1911 the University entered into an agreement with five other institutions to share in the expense incident to securing a Japanese exchange lecturer. Dr. Inazo Nitobe delivered a course of lectures at the University, in May of 1912, upon life and customs of the people of Japan. Hamilton Wright Mabie was sent to Japan in exchange.

In 1913 the Carnegie Endowment for International Peace undertook to finance the plan and Mr. Kakauza Okakura is to deliver a similar course of lectures at the

University some time during the current college year.

The institutions included in this plan are Minnesota, Illinois, Columbia, Brown, Virginia and Johns Hopkins.

Jenks, Albert Ernest. Born November 28, 1869, in Michigan; American ancestry; m. Maud Huntley; one son; assistant professor of sociology 1896-97; professor anthropology since 1897; B. S., Kalamazoo college '96; B. S., Chicago, '97; Ph. D., Wisconsin, '99; Phil. ethnological expert with Am. museum of natural history, 1906; econ. editor of trades journal 1899-01; chief of ethnological division of Philippine exhibit at Louisiana Purchase exposition, 1904; assistant ethnologist in bureau of American ethnology, Smithsonian institution, 1901; ethnologist of same 1902; assistant chief ethnological survey, Philippine islands 1902-03; chief of same 1903-05; research work conducted in connection with these positions; books on savage childhood. The childhood of Jishib, the Ojibwa; Balonglong, the Igorot boy; The Bontoc Igorot; The wild rice gatherers of the upper lakes; received gold medal of honor from Philippine government; gold medalist four times from Louisiana purchase exposition for ethnological work; member American Anthropological society, American sociological society, Nat. Geog. Soc., Sigma Xi, Phi Sigma Kappa, Minn. Acad. Soc. Science, Campus Club, Six o'clock club, Secretary graduate faccity 1911, fellow A. A. A. S.; Baptist.

Jensen, Estella L., mycologist in plant pathology, 1913.

Jensen, Louis E., scholar in botany 1911-13.

Jerome, Waldron M. Born August 25, 1877, Minneapolis; son of Chas. T. and Ida W. Jerome; m. Kathryn B. Libby; lecturer in college of law 1911 to 1913; professorial lecturer in charge of evidence; B. S. '00; L. L. B., Harvard, '06; Phi Beta Kappa; member law firm of Lind, Ueland and Jerome since 1906; Congregationalist.

Jerrems, Alexander, N., football coach season of 1896. Born in Sidney, Australia. Star football player in the Pottsdam, Pa., high school and on Yale teams from 1893 to 1895, playing right half-back and in his senior year full back.

Jett, C. Coleman, instructor in machine design and drawing, 1900-02.

Jewett, J. Dudley, instructor in the administration of anaesthetics, college of dentistry, 1890-92; lecturer of anaesthesia, 1892-93; also chief of the anaesthetic clinic, 1893-95.

Jewett, W. Fred, assistant in technics and clinics, college of dentistry, 1895-96.

Jewett, James Richard, Weyerhaeuser professor of Semitic languages and history 1895-1903. See first edition.

Joel, L. A., assistant in chemistry, 1911-12.

Johann, Albert E., assistant in pediatrics, 1913.

Johnson, Alice L., cataloger from 1907 to 1909.

Johnson, Adolph W., lecturer on (homeopathic) pharmacy, 1904 to date.

Johnson, Charles E. Born in 1880 in Christiana, Norway; instructor in comparative anatomy of vertebrates since 1907; A. B. '06; A. M., '07; Ph. D.'12; graduate student of University of Wisconsin summer of 1910; research student Harvard medical school summer 1911; experience as rural school teacher; substitute instructor in zoology and histology at Hamline University spring of 1907; research work in vertebrate embryology and morphology; publication, Development of head somites and eye muscles in chelydra serpentina, '13; member Phi Beta Kappa, Sigma Kappa Sigma Xi, A. A. A. S., associate member American ornithologists union.

Johnston, D. S. B. Conducted school in the old building in 1855-56 with an enrollment of about seventy students.

Johnson, Edward, instructor in foundry practice, 1902-06.

Johnson, E. Bird, born Sugar Grove, Pa., November 24, 1865; m. Eva Wood, one daughter and one son; B. S. 1888; deputy register until August 1, 1889; registrar from 1889 to 1905; secretary treasurer of the H. W. Wilson company from July 1904 to March 1906; manager of the Index Press from fall of 1905 to April 1906; elected secretary of the General Alumni Association in March 1906, and entered upon his duties, April 21, of the same year. Established the Minnesota Alumni Weekly in the spring of 1901, and was its editor, publisher and proprietor until he turned it over to the General Alumni Association when he became its secretary; has been its editor since that date. Published, "An optimistic equation and other optimism," 1903. Forty years of the University of Minnesota, 1910; eleven editions of the Alumni directory; several reports upon specific matters connected with the University; editor and publisher of the "University dictionary," two editions; helped to organize and was elected first president of the (national) Association of Alumni Secretaries, member St. Anthony commercial club; Congregationalist.

Johnson, Edward C. Student assistant in botany, 1906-07.

Johnson, Frank Amos. Register, 1884-89. Born in Pennsylvania, June 3, 1861. Entered the University in the fall of 1878; left to teach and study shorthand; re-entered in the fall of 1883, and graduated in June, 1886. During the first year after his

return to the University he acted as secretary to President Folwell, and upon the coming of President Northrup, he continued as his secretary and was appointed registrar, a position he held until 1889; pursued work in college of law for a few months, then passed the state bar examination before the supreme court, and was admitted to practice, 1888. Soon afterward, Mr. Johnson became interested in typesetting machines and has given himself to this work since the fall of 1888. Has invented and patented many machines and improvements. Now a consulting engineer, patent attorney and manufacturer of specialties in Jersey City, N. J.

Johnson, Ida Petrine, Norwegian ancestry; instructor in German 1912 to date; B. A., Wisconsin '06; M. A., same, '12; four years experience in Ashland, Wis., high school; assistant in department of German, Wisconsin, 1910-12; member, Phi Beta Kappa; Lutheran.

Johnson, John A., born July 28, 1861, St. Peter, Minn. Educated in public schools of St. Peter. Early years was clerk in a drug store; became part owner and publisher of St. Peter Herald in 1886 and continued in the business till 1907. Was state senator from St. Peter district and was three times elected governor of Minnesota, serving from 1905 to Sept. 21, 1909, the date of his death. Served seven years in M. N. G., retiring with rank of Captain. Regent of the University ex-officio.

John A. Johnson Scholarship Fund. Friends of the late Governor John A. Johnson contributed $19,300 (It is expected that this will be eventually increased to $30,000) to found a scholarship fund for the purpose of honoring the memory of John A. Johnson. The donation was made with the following stipulations which were accepted by the Board of Regents:

The fund was created for a two-fold purpose, namely:

(1) To assist in making provision for Mrs. John A. Johnson during her lifetime.

(2) Thereafter to be available for the education of worthy students at the university.

This scholarship fund has been contributed by the donors, and will be paid to the Board of Regents of the University of Minnesota, provided:

(1) That during her lifetime or until she shall in writing waive the benefit, Mrs. Johnson shall receive and enjoy the income from the fund, and that upon her demise such income shall be available and used by the Board of Regents toward the education and maintenance of worthy students during their collegiate course, or while doing post-graduate or research work, as the Board of Regents may determine.

(2) That, subject to the aforesaid provision made for Mrs. Johnson, said fund shall be the absolute property of the University, for the aforesaid purposes, upon the further express condition, and not otherwise, that the control, management and investment of said fund shall be solely vested in said Board of Regents.

Johnson, Joseph T., assistant in horticultural crop investigations 1912.

Johnson, Reuben, teaching assistant in physiology 1913-.

Johnson, R. W., Maj. Gen., U. S. A. Professor of military science and tactics, 1869-71. Member of the first University faculty.

Johnson, William Clinton, demonstrator in pathology and bacteriology 1911-13; instructor in pathology 1913-.

Johnston, Allen Davidson, instructor in blacksmithing 1912 to date.

Johnston, A. Walfred, instructor in geology 1912 to date.

Johnston, George H. Instructor in psychology, 1903-05. Graduate of the University, class of 1897.

Johnston, John Black, born October 3, 1868, Belle Center, Ohio. Ph. B., Michigan, 1893; Ph. D., same, 1899. Marine biological laboratory, summers 1896, 1901; Bermuda biological station, summer 1904; zoological station, Naples, and University of Freiburg, Germany, 1904-05; assistant and instructor in zoology, Michigan, 1893-99; assistant professor of zoology, University of West Virginia, 1899-1900; professor, same, 1900-07; assistant professor of anatomy of the nervous system, University, 1907; associate professor of comparative neurology, 1908; professor of comparative neurology, 1909; secretary of medical faculty 1910-, editor-in-chief Research Publications 1911-, Staff contributor to Die Ergebnisse der Anatomie und Entwicklungsgeschichte, and to Die Ergebnisse und Fortschritte der Zoologie, Member Editorial Board Journal Comparative Neurology, Member International Brain Commission, sub-commission for Comparative Neurology. Author of The Brain of Acipenser; The Brain of Petromyzon; Das Gehirn und die Cranialnerven der Anamnier; The Morphology of the Vertebrate Head; The Cranial nerves of Petromyzon; The Nervous System of Vertebrates, a text book of Comparative Neurology; On the Significance of the Caliber of the Parts of the Neurone in Vertebrates; A New Method of Brain Dissection; The Central Nervous System of Vertebrates, historical and critical essay; The Morphology of the Forebrain in Vertebrates; The Radix Mesencephalica Trigemini; The Limits of Ectoderm and Entoderm in the Mouth of Vertebrates, and the Origin of Taste Buds; The Problem of the Correlation Mechanisms; The Evo-

lution of the Cerebral Cortex; The Telencephalon of Selachians; The Telencephalon of Ganoids and Teleosts; The Telencephalon of Cyclostomes; The Nervus terminalis in Reptiles and Mammals; The Morphology of the Septum and Hippocampus in Reptiles and Mammals; and other papers. Charter member Michigan Academy of Science and Minnesota Neurological Society; Member of the American society of zoologists; American Naturalists; American Association of Anatomists; Sigma Xi; Fellow A. A. A. S.

Jones, Albert I. Instructor in metal working, 1888-90.

Jones, Ada Margaret, born at Manchester, Iowa; B. S. in Home Economics, Ames; summer school work at Columbia; has taught cooking at Morris school of agriculture since 1911.

Jones, E. Mendelssohn, clinical assistant in surgery 1911 to date.

Jones, Frederick Scheetz., born April 7, 1862, Palmyra, Mo. St. Paul's school, Palmyra; Shattuck school, Faribault; B. A., Yale, 1884; University of Berlin, 1887-88; Royal polytechnic, Berlin, 1887-88; Swiss polytechnic, Zurich, 1888-89; M. A., Yale, 1892. Taught at Shattuck, 1884-85; instructor in physics, University, 1885-87; professor of physics, 1889 to 1909. Dean of the college of engineering, June, 1902 to 1909. Author of short articles upon scientific subjects; lecture notes, commencement addresses, and reports on laboratory tests for commercial purposes. Has in preparation a text on physics for use in the University classes. Fellow of the American association for the advancement of science; member of the society for the promotion of engineering education; Phi Beta Kappa; Sigma Xi; Psi Upsilon; and Yale Skull and Bones.

Jones, Harry W., instructor in architecture, 1891-93.

Jones, Herbert W. Clinical instructor in nervous and mental diseases, 1905 to date.

Jones, Margaret, instructor in Morris school of agriculture, 1911 to date.

Jones, Roland R., instructor in operative dentistry, 1908 to 1911.

Jones, William Alexander. Born May 24, 1859, St. Peter, Minn. St. Peter high school; University of the City of New York, medidical department, 1881; instructor in mental and nervous diseases, 1888 to 1800 adjunct professor of same, 1890-95; clinical professor same, 1895 to 1913; professor emeritus to date. Assistant physician St. Peter state hospital for insane, four years; member of the board of trustees, two years; member of state board of health. State Hospitals for the Insane. Author of various articles in medical journals; editor of Minnesota State Medical Journal and Northwestern Lancet. Attending neurologist to City hospital; chief of staff of Northwestern, St. Mary's, Asbury, Norwegian, Swedish hospitals.

Joslin, John Carlos. Born April 25, 1876, Richland county, Wis. Common schools and high school. Practical butter maker for eight years. Won many high Fair at St. Louis, with the title of the scores and the grand prize at the World's World's champion butter maker. Creamery inspector with the state dairy and food commission for three years. Assistant in creamery, dairy school, 1907-1908.

Judson, Harry Pratt. A native of the state of New York. Prepared for college at Louisberg, N. Y., and graduated from Williams in 1870 with the degree of B. A. For fifteen years he was connected with the public schools of Troy, N. Y., teaching principally history and the classics. In 1883 he received the degree of M. A. from his alma mater. For the next two years he was principal of the Troy high school. In the fall of 1885 Mr. Judson was called to the chair of history in the University. Resigned in 1891 to accept a position in the University of Chicago. Now president of the University of Chicago. Author of many texts, mainly historical, and many contributions to periodical literature.

Judson, Leulah Jeannette. Born at Dobbs Ferry, N. Y. B. A., University, 1903; M. A., Columbia, 1904. In charge of the department of history of the Western college for women, Oxford, Ohio, 1904-06. Instructor in history, University, 1906-07. Now Mrs. E. W. Hawley.

Juergensen, Hans. Born April 22, 1872, Hadersleben, Germany. Common schools of Germany and Fort Wayne, Ind., high school and college; six years in Concordia college, Ft. Wayne; three years in divinity course of Concordia seminary (Lutheran), St. Louis, Mo.; graduate work at the Universities of Leipsig, one semester; Munich, one semester; Johns Hopkins, one year; working in Greek, Latin and modern languages. Professor at Concordia college, St. Paul, nine years, teaching at various times Greek, Latin, English, German, French, history, music. Instructor in German, University, 1904 to 1907; assistant professor, 1907 to September 5, 1912, the date of his death.

Junior Ball Association. This is an independent organization of each junior class and exists for the sole purpose of managing the function known as the junior ball, which usually is held early in February.

Junior Short Course. This course has been offered annually since 1911. It is a special one-week course for boys and girls, mainly made up of those who have won prizes in the county industrial contests, the prizes being the expenses for

one week's work at the school of agriculture. The attendance in 1911 was 75, in 1912, 310.

Kadlec, Ethel. Assistant in home economics, Crookston school of agriculture, 1913.

Kappa Alpha Theta. Upsilon chapter, established in 1890. Founded at DePauw university in 1870.

Kappa Kappa Gamma. Chi chapter established in 1880. Founded at Monmouth college, 1870.

Kappa Sigma. Beta Mu chapter established in 1901. Founded at the University of Virginia, 1867.

Kavanaugh, William Harrison. Born August 19, 1873, at Williamsport, Pa., American, English and Irish ancestry; m. Julia S. Vogt; one daughter and one son; instructor in mechanical engineering, 1901; assistant professor of same in charge of experimental engineering, 1902-07; professor of experimental engineering 1907 to date; mechanical engineer, Lehigh, '94; instructor, Illinois, 1897-98; with the motive power department of the Pennsylvania railroad, 1898-01; has had considerable experience as consulting engineering; was in the mercantile business at Williamsport, Pa., 1895-97. Research work in study of efficiencies of steam separators, study of relative efficiencies of cast iron and pressed steel radiators, flow of water through locomotive standpipes, study of concretes made of various Minnesota aggregates; has published a number of articles in the technical press; member American Society of Mechanical engineers, American and International societies for testing materials, Society for Promotion of Engineering Education; Protestant.

Kawa Club. An organization of men engaged in work on university publications. Organized in 1907.

Keith, Effie A., cataloger, 1910 to date.

Keller, Frank H., instructor in chemistry, 1899-1900. Graduate of the University, 1898. Now metallurgist for the Utah consolidated smelter company, Murray, Utah. Sigma Xi.

Kelley, William Louis. Special lecturer, college of law, 1903-07.

Kellogg, Frank B. Lecturer on equity jurisprudence and procedure, 1889-94. From 1904 to 1906 special lecturer in the college of law.

Kendall, Laura, instructor in University high school, 1912 to date.

Kennedy, Cornelia, instructor in agricultural chemistry, 1910 to date.

Kennedy, Jane, medical examiner for women, 1900-12. Appointed official physician of the University for women students in the fall of 1910.

Kennety, W. H., in charge of the forestry experiment station at Cloquet, 1912 to date.

Kent Literary Society, The. A law literary society whose membership is limited to thirty. Established in——. Accomplishments essential to the successful attorney are given special attention in the programs of this organization. To train skillful debaters, polished orators, and well-rounded literary persons capable of expressing themselves with ease and force, are its main objects.

Kent, Raymond Asa, born July 21, 1883, at Plymouth, Ia.; English ancestry; m. Frances S. Morey; assistant professor in education, 1913; A. B., Cornell, 1903; A. M., Columbia, 1910; represented Cornell in intercollegiate debate, 1902; took second place in state intercollegiate oratorical contest same year; has had professional experience in school work at Fountain, Mabel, Lanesboro, and Winona, Minn., 1904-13; secretary of the Minnesota State commission on education, 1913 until the work is completed; member committee of M. E. A. on standardization of high school subjects, 1911-1912; member M. E. A., Minnesota Academy of Social Science; Methodist.

Kepner, Ben Hur, assistant in chemistry, 1911-12.

Kerker, John F., assistant in poultry husbandry, 1913.

Kerr, Charles D., lecturer on law of partnership, 1888-90.

Kesson, Floy, instructor in music, school of agriculture, 1904 to date.

Keumpel, Lee, lecturer on railroad traffic, 1913.

Keyes, A. D., lecturer on Minnesota ractice, 1894-1900.

Keyes, Charles F., instructor of language, music, school of agriculture, 1898-99; registrar and instructor in reading and history, 1899-00; registrar, geography and history, 1900-03. Practicing lawyer. Treasurer of the General alumni association.

Keys, Makhlout. This was the junior annual of the class of 1885. This was the first junior annual, but does not belong to the series of Gophers which began publication in 1888. This was a paper covered book of 130 pages and followed somewhat along the line of the earlier Gophers.

Kiehle, David L., Preston, Regent, ex-officio, state superintendent of public instruction, 1881-91. Secretary of the board for many years. Lecturer on pedagogy, 1891-92, 1892-93; professor of pedagogy, 1893-1902; professor emeritus, 1910 to date. Of German ancestry, born in Dansville, N. Y., in 1837. Graduated from the State normal school at Albany, N. Y., in 1856, and from Hamilton in 1861, from which he received the degrees of A. M. in 1864, and LL. D. in 1891. In 1865 he

was graduated from Union theological seminary, New York, and ordained in the Presbyterian church. Came to Minnesota same year and organized the Presbyterian church of Preston, where he remained until 1875 and to which he returned in 1902. Was county superintendent of schools six years; a member of the state normal board five years. In 1875 he was elected principal of the state normal school at St. Cloud, remaining in that position until his appointement, by Governor Pillsbury, as superintendent of public instruction in 1881, and to which he was reappointed six successive terms, resigning September 1, 1893.

During these twelve years, in which he was also ex-officio a regent of the University, he was active and influential in securing a generous expansion, and a more perfect organization and articulation of the several departments of our public school system. Institutes and teachers' summer training schools were provided for all counties of the state; the state one-mill tax for the support of common schools was established; the system of state high schools was organized, and by an original plan proposed and supported by him, there was established and developed by the regents of the University the school of agriculture, which has finally solved the problem of agricultural education to the satisfacstion of all concerned. Resides in Portland, Oregon.

Kiehle, Fred A., instructor in medical Latin, 1898-02. Now practicing medicine in Portland, Oregon.

Kiehle, Louise G., instructor in physical culture, in charge of the department, 1892-1900.

Kienholz, William S., '04. Baseball coach for the season of 1907.

Kilbourne, Stanley S. In charge of the Bishop Gilbert society as student pastor, 1907 to date.

Kimball, William M., Minneapolis. Regent February 4, 1860, March 4, 1864.

King, Mary E. Born at Ellensdale, N. D.; B. A., Minnesota, 1913; short course in library economics; librarian Morris school of agriculture, 1913.

King, Roy S., instructor in mechanicl engineering, 1903-05.

King, William, teaching assistant in pathology and bacteriology, 1913.

King, Z. P., teaching assistant in physiology, 1913.

Kingsbury, F. A., instructor in physiology and physiological chemistry, 1913.

Kingston, Merton S., instructor in mining, 1910-11; assistant professor same, 1910 to date.

Kircher, Frank J., instructor in mechanical engineering, 1911-12.

Kirchner, William H. Born at Templeton, Mass. The Templeton high school; graduated at the Worcester polytechnic institute, 1887, having completed the course in drawing and design. From 1888-89 he was an instructor in drawing and design at the Rose polytechnique institute, Terre Haute, Indiana. In 1889 he was promoted to the Junior polytechnic institute library. He remained at Rose nearly six years, and came to the University of Minnesota January, 1894, first as instructor in drawing, later as assistant professor in charge of the department to 1907; professor of drawing and (since 1909) descriptive geometry to date.

Klaeber, Frederick. Born October 1, 1863, Beetzendorf, Germany; great-grandson of Johann Bartholomaeus Trommsdorff, the chemist; m. Emma Charlotte Wahn; Koenigliche Landesschule Pforta; universities of Leipzig, Halle, Kiel and Berlin; Ph. D., Berlin, 1892. Instructor in Old and Middle English, University, 1893-96; assistant professor of English philology, 1896-98; professor of comparative and English philology, 1898 to date.Representative of University at the University of Berlin centennial in 1910. Author of Das Bild bei Chaucer; Old English Historical Prose Texts relating to the Fall of Man; Studies in the Textual Interpretation of Beowulf; Beowulf Notes; Die Aeltere Genesis und der Beowulf; Aneis und Beowulf; Die Christlichen Elemente in Beowulf; Zur altenglischen Bedeutungslehre; Zur altenglischen, Beda-uebersetzung; Notes on Old English Prose Texts; besides numerous other articles and reviews in leading philological journals, Member of modern language asociation of America, Dialect society, advisory council of simplified spelling board, Concordance society, International phonetic association, Grimm-Gesellschaft.

Klopsteg, Paul E., assistant in physics, 1911 to date.

Knapp, Miland Austin, instructor in dental technics, 1891-92; clinical instructor in orthodontia, 1892-93.

Knight, Ray Roberts. Born June 11, 1881, Nokomis, Ill.; American ancestry; m. Grace Ellen Morris; one son and one daughter; instructor in anaesthesia and physical diagnosis, college of dentistry since November, 1911; 1913, given charge of X-ray work in college of dentistry with rank of assistant professor; A. B. '03; M. D. '06; engaged in general practice of medicine since 1906; member County, State and American medical associations, Nu Sigma Nu, Beta Theta Pi; Presbyterian.

Knight, Seth F., instructor in surveying, 1910-11.

Knights of Columbus. An organization of Catholic men of the University. Established in March, 1912.

Koch, Margaret, assistant (homeopathic) in paedology, 1903 to 1909.

Koenig, Alfred Edmund, instructor in German, 1910, to date.

Koerner, Arthur C., instructor in music, school of agriculture, 1899-04.

Kohler, Alfred Rudolph, instructor in horticulture, 19— to 1912; assistant professor to 1913.

Kolliner, Robert S. Born March 22, 1868, at Baraboo, Wis.; son of Simon and Amelia Kolliner; m. Mathilda H. Newmann; two sons; lecturer on sales, 1897-98; professor personal property, 1898-1912; B. L., Wisconsin; LL. B., Minnesota, 1890; engaged in the practice of law since that date; director in Kolliner Bros. Newman Co., manufacturers, Stillwater, Minn., and a director of the Rose Lake Lumber Co., of Idaho; was one of the organizers of the Associated Jewish Charities of Minneapolis; member Minneapolis Commercial Club, Masonic order, Delta Chi, and the Hebrew Reform Temple.

Komensky Club was established in 1907 and has a membership of twenty. Its purpose is to study Bohemian literature and history. It provides lectures by outside Bohemians of prominence and by members of the club. It offers class work in Bohemian, together with extension work among the Bohemian people of Minneapolis and St. Paul.

Koon, M. B. Special lecturer, college of law, 1902-06.

Kovarik, Alois Francis. Born March 8, 1880, Spillville, Iowa; Bohemian ancestry; scholar in physics, 1902-04; instructor, 1904-12; assistant professor, 1912 to date; B. A. '04; M. A. '07; Ph. D. '09; two years' research work at Manchester, England; John Harling, research fellow in physics, Victoria University, Manchester; research work has been mainly in field of radioactivity, including Absorption and reflection of Beta-particles by matter, reflection of homogeneous Beta-rays of different velocities, effects of changes of pressure and temperature in gases upon the velocity of the negative ion produced by the ultraviolet light; publications have been mainly in physical journals and proceedings of scientific societies, covering reports on special research work in the field of radioactivity; member Sigma Xi, Phi Beta Kappa, American Physical society, fellow in A. A. A. S.

Krahler, Charles H., statistician, Halstead, 1910 to date.

Kremer, Frederick B. Clinical instructor in prosthetic dentistry, 1892-93; also crown and bridge work, 1893-95; Professor of prosthetic dentistry and crown and bridge work, 1895-96. Born Biddleburg, Pa., 1861. Graduate at University of Iowa. Came to Minnesota in 1882.

Krey, A. C., instructor in history, 1913, to date; A. B., Wisconsin, '07; A. M. ibid, '08; Ph. D., '13; fellow at Wisconsin and instructor South Division high school, Milwaukee, 1908; instructor in history, University of Texas, two years; instructor in history, Illinois, 1912-13; author of bulletin on the teaching of history in high schools; joint author of Source Problems in Mediaeval History, '12.

Kritschewsky, Wolf, instructor in chemistry, 1913.

Krogh, George F., assistant in mechanics, 1909 to date.

Kugimoto, Massji. Born December 25, 1886, Tokyo, Japan; assistant in animal husbandry, 1912-13; graduate Tokyo imperial university, '08; M. S., Minn., '12.

Kunze, William F., assistant in chemistry, 1895-96. Superintendent of schools at Hastings and Lake City, 1906. Graduate of University class of 1897. Co-editor with Professor C. W. Hall, of a text bok on physical geography.

Laate, Gurid, assistant in domestic science, 1912-13.

Laboratory of Anatomy. See Pharmacy Green House.

Laboratory of Animal Research was built in 1902, by the State, for the use of the laboratory division of the State Board of Health in the investigation of human and animal diseases. It serves for the housing and care of animals required in this work. It contains a crematory for the destruction of refuse. The building adjoins the Institute of Public Health and Pathology, in which the laboratories of the of the State Board of Health are placed. It is of two stories, in pressed brick, and cost approximately $8,000.

Laboratory of Medical Chemistry. This is a one-story brick and frame building, erected in 1893 at a cost of $7,500, the money coming out of the current expense fund. The building was enlarged and remodeled in 1902 at a cost of $3,000. Originally it provided quarters for the chemistry department of the college of medicine. With the merging of this department with the general chemistry department the building was occupied by the school of chemistry. It contains an amphitheatre, laboratories, preparation rooms, store rooms and offices.

Lacy, Charles Y., assistant professor, in charge of the theory and practice of agriculture, 1874-78; professor theory and practice of agriculture, 1878-80.

Ladd, Sumner, lecturer on laws of taxation, 1888-89.

Alumni Professional Legal Directory

MINNEAPOLIS, MINN.

Tri-State Center 335 N. W. Nic. 710

GEO. V. B. HILL & CO.
Real Estate, Insurance
Loans
307-308 Globe Building Minneapolis, Minn.

T. S. Center 2694

EUGENE C. NOYES, Law '01
Attorney at Law
General Practice
246 Security Bank Bldg., MINNEAPOLIS, MINN.

George C. Stiles John P. Devaney, Minn. '07

STILES & DEVANEY
Lawyers
535-544 Andrus Bldg., MINNEAPOLIS, MINN.

The WASHINGTON YALE Agency
Real Estate, Rentals and Loans
1046-48 Security Bank Bldg., MINNEAPOLIS

ST. PAUL, MINN.

KAY TODD, '00, '01
Attorney at Law
1605 Pioneer Press Bldg. ST. PAUL, MINN.

MINNESOTA

J. E. SUNDBERG, Law '10, 11
Attorney and Counsellor at Law
KENNEDY, MINN.

BENJAMIN TAYLOR, '93 Law '95
Lawyer
MANKATO, MINN.

Bjorn B. Gislason, Law '00 Arni B. Gislason

GISLASON & GISLASON
Attorneys and Counselors at Law
MINNEOTA, MINN.

CHESTER S. WILSON, '08, Law '12
Lawyer, Court Reporter
With Wilson and Thoreen
22 Lumber Exchange Bldg. Stillwater, Minn

FREDERICK W. SENN, Law '09
Attorney and Counsellor at Law
County Attorney Waseca County
Farmers' National Bank Bldg. Waseca, Minn.

ILLINOIS

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MONTANA

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Reference Scandinavian-American Bank, Missoula
Farmers' State Bank of Stevensville
9-10 Duncan Block Missoula, Montana

NEW YORK

ROBERT LESLIE MOFFETT, '89
Counsellor at Law
52 William Street NEW YORK CITY

NORTH DAKOTA

T. F. MURTHA, Law '01
Attorney at Law
DICKINSON, N. D.

FRANK P. GOODMAN, Law '11
Attorney at Law
Fargo, North Dakota or Lake Alfred, Florida

ARGALUS W. GRAY, Law '98
Attorney-at-Law
KENMARE, N. D.

Ladd, Mrs. Jessie Sweat, was born October 29, 1860, at Brownfield, Maine, of English ancestry; m. Alfred G. Ladd; two daughters and one son; member of the class of 1881 at Minnesota and '83 at Wellesley; house director of Shevlin Hall since its opening in 1909; chaperone at Sanford Hall; taught in public school and Bennett seminary; Universalist.

Laing, Richard W., assistant professor in charge of history and elocution, 1874-75; professor of history and elocution, 1875-76; professor of history, 1876-77; professor of history and in charge of French, 1877-70.

Lajoie, John M., assistant in medicine, 1913.

Lambda Alpha Psi. This society was founded in 1908, for the purpose of encouraging the study of languages and their literature. To this end it maintains a course of popular lectures on artistic, literary and linguistic subjects, given at intervals throughout the college year, by various professors in the University and noted educators from abroad. A small number of students from the senior class in the college of science, literature, and the arts, who have specialized in languages and literature, are elected each year to membership, such elections being based upon scholarship and high character.

Lambert, Edwin M., instructor in mathematics and mechanics, school of mines, 1909-11; assistant professor same since 1911.

Lambert, Ward, assistant in chemistry, 1912-13.

Lamphrey, Morris, St. Paul. Appointed regent, 1874, re-appointed 1877, died April 9, 1879.

Lampson, Herbert G., assistant in clinical pathology, 1911-12.

Lancaster, William A. Born December 29, 1859, Detroit, Me. Admitted to bar, Maine, 1881; practiced in Minneapolis since 1887. Special lecturer on obligation of contracts, college of law, 1907 to 1909.

Lane, Dwight Judson, instructor in poultry hsbandry, 1912 to date; assistant poultryman, experiment station.

Lane, Grace, cataloger, 1909 to 1911.

Lando, David, assistant in medicine, 1900-04; clinical instructor in medicine, 1904 to date of death, May 18, 1908.

Lansing, Robert C., assistant professor of English in the department of agriculture since 1907. Graduate of the University of Nebraska. Married Elfleda Haecker, of the class of 1898.

Larson, Earl B., abstract clerk, business office, 1911 to date.

Larson, M. S., assistant in traction engineering, 1913.

Larson, Winford Porter, demonstrator in pathology and bacteriology, 1911 to 1913; assistant professor of bacteriology to date.

Lasby, William Frederick. Born October 25, 1876, Castle Rock, Minn.; American ancestry; m. Genevieve P. Adams; one daughter; instructor, 1908-10; clinical professor of prosthetic dentistry, 1910-12; assistant professor of same to 1913; associate professor of prosthetic dentistry and orthodontia to date. B. A., Carleton, '00; D. D. S., inn. '03; practice of dentistry, 1903-08; practicing and teaching, 1908 to the present time; member Minneapolis and Minnesota state dental societies; Congregationalist.

Laton, W. S., professor of diseases of the nose and throat, 1888-03. Died 1907.

Lauie, A. A., head nurse, school of agriculture, 1913.

Laurent, Antoine A., clinical assistant in diseases of children, 1912-13.

La Vake, Rae Thornton, temporary assistant in pediatrics, 1912-13.

Law, Arthur Ayer. Born April 16, 1872, Harvard, Ill.; English, Scotch and American ancestry; m. Helen Elizabeth Lougee; two daughters; assistant to the chair of operative surgery, 1894-99; instructor in operative surgery, 1899-03; clinical instructor in surgery 1903-09; clinical professor of surgery to 1913; associate professor, 1913-; M. D. '94; graduate work in Polyclinic of Philadelphia and New York medical school; surgeon U. S. A. Spanish American war in the Philippines; has published papers in medical journals upon various interesting types based on cases met in practice; member Minnesota state, Hennepin Co. and American medical associations, Minn. Academy of medicine, Western surgical association; Episcopalian.

Law Alumni Board of Visitors Report. Printed in Minnesota Alumni Weekly of June 17, 1912.

Law Building.; Completed in 1889 at cost of $30,000. It is built of red brick with red sandstone trimmings and has a frontage of eighty feet, with a floor space of nineteen thousand square feet. It contains the office of the dean, the library, a large lecture room and several smaller recitation and lecture rooms. An addition to this building was erected in 1904 at a cost of $28,000, which nearly doubled the capacity of the building.

The re-constructed building provides for the housing of all the work of the law school. The entire upper floor story is devoted to the library, except that portion

HERMAN WINTERER
Lawyer
VALLEY CITY, N. D

OREGON

McCANTS STEWART, Law '99, '01
Attorney and Counsellor at Law
Notary Public
221 Abbington Building
106½ Third Street PORTLAND, OREGON

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reserved for judges' chambers, a court room, clerk's office and jury room, and for professors' offices. The new library reading room, provided in the addition, is 81x42 feet and is a model of completeness and convenience. The first floor provides a

large auditorium, lecture rooms, and private offices for the professors of the school. In the basement of the addition, which is high, rooms are provided for student gatherings and conferences. As now constructed and re-arranged, the building provides all of the conveniences of a modern court house for the practice department.

Law Library. This library contains nearly all the English and Canadian reports from the earliest decisions down to the present time; all reports of the several states of the Union, excepting those of a few inferior courts; all the reports of the United States Supreme Court, and all the Federal Court reports. It contains also the digest of these reports and an excellent selection of standard text-books, encyclopaedias and law dictionaries.

Law Literary Society, The. Organized during the first year of the existence of the college of law.

Law Loan Fund. The alumni of the college of law undertook to raise a fund of $10,000, to be used under the direction of the faculty of the college of law to loan to students needing assistance during their college course.

Law, School of. This department of the University was provided for in the original charter of the University, but it was not until 1888 that it was organized under the title of the college of law. The work of instruction began in September of the same year under the direction of William S. Pattee, who had been elected dean. There were twenty-seven students present on the first day. The first year of the college's existence was spent in the Hermean room in the basement of the Old Main building, but in the summer of 1889 a new building was erected, which was occupied in October, 1889. The growth of the college was very rapid, so that enlarged accommodations became necessary. Accordingly in 1904-05 a large addition was built in the rear of the old building.

At the time of the establishment of the college, no other educational requirements were made for admission than that the applicant should have had such a general education as would enable him to pursue the study of law with advantage to himself. But in conformity with the general movement in other parts of the country, these admission requirements were steadily pushed upward until, in 1901, admission to regular standing was substantially limited to graduates of a high school. In 1909 the applicant was required to have completed one year of academic college work, and in 1911 these requirements were increased to two years of college work. Persons over twenty-one years of age having a high school education are also admitted as special students, not candidates for a degree.

At the beginning the course of instruction extended over two years in both day and night schools, but four years later the night course was extended to a period of three years, and in 1895 the day course was extended to three years. In 1907 the night course was lengthened to four years. In 1891, graduate work leading to the degree of master of laws was offered, and later the degree of doctor of civil laws was established, but in 1911 graduate work was temporarily discontinued.

From the first establishment of the college, Dean Pattee held classes at night for benefit of those students who were unable to attend during the day. From this beginning grew a flourishing night school, in which the attendance was frequently almost equal to that in the day school. In 1912 night courses ceased to be offered for graduation, but continued to be given by the law faculty under the auspices of the division of university extension. Students in the night courses do not ordinarily qualify for graduation, but it is possible for those who complete the night course with credit to receive university credit towards a degree by taking the regular law school examinations. Special attention is given to instruction in practice, and practice courts are maintained in which the procedure and methods of business are made as nearly like those of the state courts as possible. Students are also afforded an opportunity for actual experience in practice in connection with the Minneapolis Legal Aid Bureau.

William S. Pattee served as dean from the organization of the college in 1888 to the time of his death in 1911. He was succeeded by William R. Vance, formerly professor of law in Yale University, whose service began in 1912. The faculty consists of ten professors, of whom six give their entire time to the work of the school. In addition, instruction is given on particular topics by special lecturers selected from the bench and bar of Minnesota. The so-called "case method" of instruction is used in all of the regular courses, collections of decided cases on the topics under

consideration being put in the hands of the students and used as the basis of discussion. Standard text books, however, are frequently cited and students are expected to make frequent reference to them. The tuition fee is $65 a year, payable one-half in advance at the beginning of each semester.

Graduates of the Law School are admitted to the bar in Minnesota without further examination, upon presentation of their diplomas.

Laws Relating to the University. A book of 132 pages compiled under direction of Regent John S. Pillsbury and printed at his expense June, 1892. Includes all laws passed by the legislature, relating to the University, up to that date. A complete compilation of laws relating to the University, including the year 1909, will be found in Forty Years of the University of Minnesota.

Lawton, Harry Comegys. Born 1880, Rutland, Vt.; Scotch English ancestry; m. Helen Fuller; instructor in prosthetic dentistry and dental anatomy, 1908-12; assistant professor to 1912, and orthodontia, to date. D. D. S. '08; general practice since graduation; member St. Paul free dental clinic, St. Paul dental society, Minnesota state dental society.

Leach, Helon E., assistant manager of athletics, 1906-08; manager, 1908 to 1913. B. A. '05, LL. B. '08; member of the basketball teams of 1904 and 1905 and the baseball team of 1904.

Leavenworth, Francis P. Born September 3, 1858, Mt. Vernon, Ind.; son of Seth M. and Sarah Nettleton Leavenworth; m. Jennie Campbell; one daughter and two sons; assistant professor of astronomy, 1892-97; professor and head of department since 1897; B. A., Indiana, '80; M. A. same; '80-'82 Cincinnati observatory; '82-'87 McCormick observatory of the University of Virginia; '87-'92 director Haverford college observatory; research work in observational and photographic astronomy; a frequent contributor to astronomical literature and journals; member Astronomial and astrophysical society of America, Sigma Xi, Phi Beta Kappa; Presbyterian.

Leavitt, Frederick E. Born November 10, 1861, at Grand Rapids, Mich.; m. Lydia Evangeline Avery; two daughters and one son; instructor in clinical obstetrics, 1900-06; clinical professor of obstetrics, 1906 to 1911; and gynecology and clerk of clinics, 1911 to 1913; assistant professor obstetrics since 1913; M. D., '94; has had hospital, general and special practice since graduation; inventor of the Leavitt uterine dilator; frequent contributor to medical and surgical publications; member county, state and American medical associations, Minn. academy of medicine, Midway physicians club.

Leavitt, Henry Hooker. Born April 1, 1861. Waterloo, Ia. A. B., Beloit, 1884; M. A. same, 1887; Chicago homeopathic college, M. D., 1886. Professor of diseases of children, college of homeopathic medicine and surgery, 1893-01; professor of diseases of nose and throat, 1901-04; professor of ophthalmology, 1904 to 1909.

Lee, Thomas G. Born November 27, 1860, Jacksonville, N. Y. B. S. and M. D., University of Pennsylvania, 1886; B. S. Harvard, 1892; University of Wurzburg, 1887, University of Pennsylvania, Assistant in histology and embryology, 1884-86; lecturer on histology and embryology, Yale, and director of the laboratory, 1886-91; assistant in histology, Radcliffe, 1891; instructor in histology, bacteriology and urinalysis. University, 1891-92; professor of histology, embryology, bacteriology and clinical microscopy, 1892-93; professor of histology and embryology, 1893 to 1909; professor of anatomy and director of the department and head of the consolidated departments of anatomy and histology and embryology to 1913; professor of comparative anatomy, 1913—. Secretary of the college of medicine and surgery and libriarian of the medical department of the University. Author of biological reports Connecticut state board of health; Implantation of Ovum in Spermophilus; Early Development of Geomys; Decidual Cavity in Dipodomys; Early Stages of Development of Cynomys; other papers relating to embryology of North American mammal, particularly rodentia. Member of the American Association of anatomists; fellow A. A. A. S.; secretary-treasurer of the American society of zoologists (central branch); secretary-treasurer of the American society of naturalists (central branch); Anatomische Gesellschaft; Minnesota academy of medicine; Minnesota academy of science; American medical association; Hennepin county medical society; Minnesota state medical society,

Leeches of Minnesota. Report of Professor Henry F. Nachtrieb of work done by the Minnesota Geological and Natural History survey in 1912 as zoological series number five.

Lehnerts, Edward M. Born March 29, 1873, Winona, Minn. St. Francis conservatory of music, 1892; Winona normal, advanced course, 1896; undergraduate work at University of Chicago, 1900-1901; B. S., Pennsylvania, 1902. Taught in rural school of Winona county, 1889-1891; principal of village schools, same, 1891-92; principal of night schools, Winona, 1894; instructor, Winona normal, 1896-00; head of depart-

ment of geography, Winona normal, 1900-07. Assistant professor of geography, University, 1907 to date. Transferred to extension division in 1913. Author of many pedagogical articles in educational journals.

Leib, William H., instructor in vocal music, 1880-84.

Leitman, Lorraine, clerk, business office, 1912 to date.

Lemstrom, Jarl Ferdinand, clinical assistant in medicine, 1911-12.

Lenart, Elta, scholar in rhetoric, 1911-12.

Lenherr, Jacob, instructor in sweet curd cheese work, 1900, '01, '02.

Leonard, Elsie P., house director of Sanford Hall, 1910 to date.

Leonard, Henry C., instructor in botany, 1876-78; professor of obstetrics (homeopathic), 1888-94.

Leonard, L. D., professor pathology and oral surgery, 1888-91.

Leonard, William Edwin. Born July 27, 1855, Minneapolis. Public schools of Minneapolis; B. A., University, 1876; M. D., Hahnemann medical college, Philadelphia, 1879; service of the Metropolitan hospital, New York City, 1879-80. Professor of materia medica and therapeutics, college of homeopathic medicine and surgery, 1888 to 1909. Author of papers read before various state and national meetings of homeopathic physicians; The Healthy Woman, etc.

Leonard, William H., professor of obstetrics, 1882-87. Yale, 1853; member Minnesota state board of health for twenty-five years. Died April, 1907.

Leonhaeuser, Harry A., professor of military science and tactics, 1895-98. Born in Allegheny, Pa., 1860. West Point, 1881, 25th infantry, Fort Meade, S. D., same year. Made first lieutenant, 1892.

Leubner, B. O., quizmaster and assistant in pharmacy, 1895-96; assistant in pharmacy, 1896-99; instructor in pharmacy, 1899-02.

Lewis, John H., Hastings, regent ex-officio, state superintendent of public instruction, January 21, 1899-January 25, 1901. Graduate of the University class of 1878. Superintendent of the city schools of Hastings from date of graduation till appointment as superintendent of public instruction, afterward going back to his old position, which he held until his removal to Ontario, Cal.

Liberma, Marco F., instructor in French, 1899-02. Graduate of the University, class of 1901. Now professor of Romance languages in the University of Cincinnati. Born in Milan, Italy. Early education in Ecole des Freres de Saint Francois Xavier. Learned English in a missionary school; studied German at Trieste, and French at the College des Lazarites in Marseilles, and later in Syria. Came to America in 1892. Taught in New York one year. In 1893 he came to Minneapolis and has taught at Morgan hall and Stanley hall. Now in the University of Cincinnati.

Libraries. The location of the University in the neighborhood of two large city libraries and the state and historical libraries and a considerable number of law libraries, adds greatly to the library advantages of the institution The general library of the University contains approximately 165,000 volumes. There are departmental libraries maintained in connection with the respective departments as follows—agriculture, law, mines, medcine (this includes pathology, medicine, anatomy, physiology, pharmacology and a small collection at the hospital and dispensary), chemistry, dentistry, pharmacy, engineering (civil, mechanical, electrical, drawing, architecture), botany, zoology, geology, physics, mathematics, astronomy, French, German, Scandinavian, rhetoric, Latin, Greek, comparative philology and a small collection on fine arts. The library catalogue contains card index for something over 100,000 volumes, about 20,000 cards being added each year. The library is the depository of the Library of Congress catalogue and receives annually the cards issued by the Harvard University library. The library occupies practically the whole second floor of the Library Building. It consists of stackrooms, a large reading room with 143 desks, seminar rooms, periodical rooms, etc. A number of departmental libraries are in charge of special librarians, namely, mines, medicine, engineering, law and agriculture.

For history of the University library see Forty Years of the University of Minnesota.

Medical School Library. This library includes a general clinical library and the departmental libraries of medicine, surgery, anatomy, pathology and bacteriology, physiology and pharmacology. The clinical collection is housed in new Millard Hall with about 8,000 volumes and 8,000 separats. The departmental collections include 6,000 volumes and 22,000 separats and over two hundred current journals are received. The Hennepin and Ramsey county medical societies' libraries, with a total of 12,000 volumes, are available for the use of the students of this college. The total number of volumes easily available is 30,000, with 35,000 separats and several hundred periodicals. The library includes several special collections such as that of the late Professor William His, of Leipzig, a gift of the Pillsburys; the valuable library on Ophthalmology of Professor Hermann Cohn, of Breslau, donated by Drs. C. J. and C. S. Spratt; Dr. Charles A. Wheaton, professor emeritus of surgery, has donated his private surgical library of about 2,000 volumes; Dr. C. L. Greene, professor of medicine, has donated his private library, including many valuable sets of periodicals; Dr. J. E. Moore, professor of surgery, has donated his surgical library and a private

collection on skin and genito-urinary diseases, of the late Dr. M. P. Vander Horck, was donated to the library by Mrs. Vander Horck. The reading room of the library is kept open every day and in the evening up to ten o'clock.

College of Engineering and Mechanic Arts Library. This library is housed in a wing of the new Engineering Building, which is one of the finest rooms on the campus and was planned in accordance with the alcove system, having a capacity of 10,000 books. The library is supplied with technical books relating to all branches of engineering and architecture and the reading room is well supplied with technical periodical literature.

Agricultural Library. This library is well equipped for supplying the needs of both undergraduate and graduate students. It contains more than 19,000 volumes of general and technical literature, government reports, etc., besides 50,000 unbound pamphlets, bulletins and reports. The general subject and author card index and the index of publications of the State Experiment Stations are always at the disposal of students to aid them in locating the various sources of information which the library affords. There are complete sets of all standard encyclopeadias and dictionaries and files of over 3,000 popular and technical magazines and periodicals. This library is located in the main building of the agricultural department and is in charge of Harriet W. Sewall, librarian.

Library Building. This building was erected in 1894, at a cost of $175,000. It is fire proof, constructed of light gray Ohio sandstone and is modeled after the style of the Parthenon. It has a frontage of 135 feet and a depth of 194 feet. It is a two-

story building, with no basement. The architects were Buffington and Sedgewick. The exterior being the work of Mr. Buffington and the interior arrangement being that of Mr. Sedgewick. The building provides accommodations for the offices of the president, registrar, purchasing agent and accountant, the general alumni association and the department of history; the assembly hall where chapel and other public exercises are held, and the library. The reading room, on the second floor is 44x100 feet and 32 feet high, and provides for 150 persons to have a table for study or reading. Opening off this room are seminar rooms, offices of the librarian and his assistants, and the stock and document rooms. The assembly room will seat comfortably 800 people.

There have been many changes made in the interior of this building during the past few years, particularly in rearranging rooms and partitions to provide for the growing needs of the library and the administrative and business offices of the University.

Lies, Eugene T., lecturer in economics, 1908-09.

Liggett, William M. Born November 5, 1846, Marysville, Ohio. Common schools and the University of Urbana, Ohio. Taught two years in common schools. Soldier in Civil war, rising to rank of colonel; county treasurer; railroad commissioner; regent of the University, 1888-06; chairman of the experiment station corps, 1893-95; dean and director of the department of agriculture, University, 1895-07. Resigned on account of ill health and was soon afterward elected assistant in agriculture. Died August 29, 1909.

Lind, John, New Ulm, Minn. Appointed regent January 16, 1893, resigned August 9, 1894. Ex-officio a member of the board, as governor of the state, 1899-00; reappointed 1908; president of the board since 1908; term expires 1914. Governor Lind was born in Sweden, March 25, 1854. He came to America when a boy and received his education in the schools of his town. He attended the University 1875-76. He began practicing law at New Ulm in 1877; served as a member of the 50th, 51st, 52d and 58th Congresses; Governor of Minnesota, 1899-00; 1st lieutenant and quartermaster 12th Regiment, M. N. G., Spanish-American war.

Lindquist, Walter, assistant agronomist, Crookston school of agriculture, 1913.

Lindstrom, Lilly A., clerk, department of agriculture, since October, 1912.

Lipp, Charles C., assistant instructor in physiology and veterinary medicine, 1905-07; assistant professor, same, 1907 to 1913.

Literary Society Addresses. In the early days of the University, the combined literary societies provided courses of lectures, usually one lecture each year. The following is a program of the lectures down to 1883, when the practice was given up: 1873-74, Professors Brooks, Peckham and Thompson, Rev. D. B. Reed and Hon. Ignatius Donnelly; 1875, Rev. David Burt; 1876, Judge A. H. Young; 1877, Dr. S. P. Staritt; 1878, Hon. D. L. Kiehle, "Demands upon American Education;" 1879, Rev. C. M. Terry, "The Specialist;" 1880, Professor G. Campbell, "History of Philosophy in America;" 1881, Professor John F. Downey, "Leaders;" 1882, Rev. M. G. Dana, "Purpose in Life;" 1883, Hon. J. Ham Davidson, "James Abram Garfield."

Literary Union (Agricultural.) Founded in 1909 as a federation of literary societies

of the department of agriculture. The union provides a cup for competition among its members as a prize for winning the annual debate. An annual program is given in the department chapel. The Philomathean withdrew from this union in 1909.

Little, John Warren. Born September 21, 1859, at South Charleston, Ohio; son of John and Mary Ann Highwood Little; m. Nellie C. Marshall; three daughters: demonstrator of operative surgery, 1897-00; clinical instructor in surgery, 1900-03; clinical professor of surgery, 1903-1909; M. D., Jefferson Medical College, Philadelphia, '83; engaged in the practice of medicine and surgery in Minneapolis since that date; has attended surgical clinics in this country and Europe; is ex-president of the Hennepin County Medical Society and the Minnesota Academy of Medicine; president of the Hill Crest Surgical hospital; surgeon for the Chicago Great Western Ry. Co.; member Commercial and Automobile clubs, Minnesota Academy of Medicine, County, State and American Medicial associations; Nu Sigma Nu and Scottish Rite Mason.

Litzenberg, Jennings C. Born April 6, 1870, Waubeek, Ia.; American ancestry; m. Elizabeth Anna Fisher, B. L. '98; one daughter and one son; instructor in obstetrics, 1902 to 1906; clinical professor, 1906-10; associate professor, 1910-13; professor and chief of the department of obstetrics, 1913—; B. S., '94; M. D., '99; general practice of medicine, 1899-09; specialist obstetrics and gynecology, 1909 to date; studied in the University of Vienna, 1908-09; research work in the hemorrhage of supraenal capsules in new born infants, long interval feeding of premature infants; frequent contributor to periodical medica literature; member Hennepin Co., Minnesota state and American medical associations, Minn. academy of medicine; Baptist.

Live stock Pavilion. Erected in 1904, at a cost of $32,000.

Loan Funds (Student). The Gilfillan, The Elliott, The Puritan Colony, Students', and The Ludden.

Loberg, Adolph E. Born January 31, 1876, Minneapolis, Minneapolis public and high schools; M. D. University, 1901. Interne, St. Joseph's hospital; house physician to Bethesda hospital, both of St. Paul, for two years after graduation. Assistant in department of nervous and mental diseases, 1906 to 1907; clinical assistant in same, 1910-13.

Local Alumni Associations. Alumni and former students of the University have more or less formal organizations in various parts of the country. Whenever an alumnus may chance to settle where there is such an organization, he should make the fact known to the other alumni living in the neighborhood. While the following list is not complete, it may prove helpful to alumni who are traveling. As the offiecrs are frequently changing, in the associations, we have simply given a list of the places where such organizations are maintained. If you chance to be in a part of the country where you would like to get in touch with any of these associations, make yourself known to any alumnus living in the city and you will be able to secure the information you desire.

Minnesota. St. Paul, Duluth, Crookston, Misabe Range, Hibbing, Virginia, New Ulm, Stearns county, Melrose and Sauk Center, Lac Qui Parle county, Madison, Montevideo, Moorhead, Winona, Grand Rapids, East Grand Forks, Alexandria, Anoka, Fergus Falls.

North Dakota. Fargo, Williston and Minot.

South Dakota. Pierre.

Idaho. Coeur d'Alene.

California—Berkley and Los Angeles, Stanford University.

Illinois. Chicago, Champaign.

District of Columbia. Washington.

Wisconsin. Madison.

Massachusetts. Boston.

Montana. Helena.

Canada. Vaucouver, B. C.

New York. New York City, Schenectady.

Oregon. Portland.

Washington. Spokane and Seattle.

Long, Frances, teaching assistant in botany, 1913—.

Longitude. The exact longitude of the University observatory is 6h. 12m. 57.041s.

Losse, Hyme, assistant in French, 1910-11; French and Greek to date.

Lothrop, Sadie E., stenographer, purchasing agent's office— to 1911.

Loucks, H. J., assistant in purchasing, 1911 to date.

Lowden Prize, The. Mr. Frank O. Lowden, of Chicago, offers as a prize to be competed for by the Northern oratorical league, an endowment of $3,000, which will yield an annual income of about $175. A prize of $100 given to the winner of the first place, $50 to the orator who gets second place, and the remainder will be set aside each year for an interest fund to accumulate, and, in time, produce another endowment.

Loyhed, Dorothy, instructor in English, school of agriculture, 1912 to date.

Ludden Trust, The. The Honorable John D. Ludden, of St. Paul, in 1902, gave the University of Minnesota $5,000, which was afterward increased to $10,000, to be held, invested and reinvested by the University, through the board of regents, and

the income thereof to be collected, received and applied by said board of regents to the financial assistance of students of either sex in the school of agriculture. The fund produces about $400 a year.

The following conditions are imposed by the donor: "The beneficiaries must be youths who are residents of the state of Minnesota; they must be and continue of unblemished moral character, and of temperate and industrious habits, and they must be such as by examination and trial shall evince and maintain a taste, habit and aptitude for study and improvement; and any student who shall fail to come, or shall cease to be, wthin the above conditions shall forfeit all claims to the benefit of such fund. Subject to these conditions the administration of such income is entrusted to the said board of regents or shall cease to be within the above conwhich may make such rules therefor as they may deem judicious."

When Mr. Ludden's will was probated, in October, 1907, it was found that he had left a considerable property to be used as the regents may direct for the aid of needy and deserving students.

This property consisted of certain real estate in St. Paul and miscellaneous stocks and bonds. The University has realized on this property $10,680.35, and has left the following described real estate: S. 1-2 of E. 1-4, Sec. 8, T. 41, R. 20, Pine county, 80 acres; lot 11, block 7, Syndicate No. 5 addition to St. Paul; lot 21, block 9, Holcombe's addition to St. Paul; lot 11, auditor's sub-division No. 10, St. Paul; lot 48, auditor's sub-division No. 10, St. Paul, and dwelling house No. 641 Wabasha street, St. Paul; lots 25, 26, 27, 28, 29, 30, block 4, Nabersberg addition to St. Paul. The total value of the legacy is not less than $50,000.

Lufkin, Harry M. Born April 13, 1860, at Shelbyville, Ill.; son of Lucia R. and Charles Dexter Lufkin; m. Edith Louise Hall; three sons and two daughters; professor of diseases of children, 1889-1907; professor of practice of medicine to 1909; attended the Illinois State Normal University; M. D., University of Michigan, homeopathic department, '83; M. D. University of the City of New York, medical department, '85; spent two years in graduate study in Europe; has been president of the Minnesota Institute of Homeopathy and is attending surgeon of the City and County hospital, and attending physician of St. Luke's and St. Joseph's hospitals; served seven years as president and member of the Minnesota State Board of medical examiners; member Town and County club and Commercial club of St. Paul; affiliated with Episcopal church.

Lugger, Otto, entomologist and botanist of the experiment station, 1887-1900; professor of entomology and botany, 1890 to date of death, 1900?

Lundeen, John A., professor of military science and tactics, 1876-79; also taught mathematics, astronomy and Swedish. See first edition.

Lundquist, Richard, technician, 1912-13.

Lyford, Lillian, assistant in physical culture, 1909 to date.

Lyle, Floyd, secretary to the president since April, 1911.

Lyon, Eveline C., medical library, 1910 to date.

Lyon, Elias Potter. Born at Cambria, Mich., October 20, 1867; m. Nellie Eastman; dean of school of medicine and professor and director of the department of physiology, 1913; B. S., Hillsdale college, 1891; A. B., same, '92; Ph. D., Chicago, 1897; M. D., St. Louis, 1910; instructor Bradley Polytechnic Institute, Peoria, Ill., 1897-1900; assistant professor, physiology, University of Chicago and Rush medical college, 1900-04; assistant dean of the University of Chicago, 1901-04; professor and head of the department of physiology, St. Louis University, 1904-13; dean of same, 1907-13; instructor in marine biological laboratory, Woods Hole, Mass., 1899-1910, summer sessions; research work in the field of general physiology, chiefly, physiology of animal behavior, tropisms, physiology of surgical shock; has published paers in the American Journal of Physiology and medical and educational papers in the Journal of American Medical Association and in Science; has served three summers as investigator for the U. S. fisheries bureau; member American Physiological society, American Naturalists; fellow A. A. A. S., associate member American Medical Asociation, member Sigma Xi, Alpha Tau Omega, Phi Rho Sigma; Presbyterian.

Lyon, Harold L., instructor in botany, 1900-04; assistant professor, 1904-07. B. A., University, 1900; M. S., 1901; Ph. D., 1903. Chemist for a sugar planter's association in Honolulu.

Lysne, Henry, clinical assistant in medicine, 1911 to date.

Mabbett, Leora E., cataloger, 1910 to date.

McBride, R. S., instructor in chemistry, 1909-10.

McCall, T. M., instructor in Crookston school of agriculture, 1911 to date.

McCarty, C. P., assistant state tax commission since 1911.

McCarty, Edward P. Born October 1, 1873, Clifton, Ill. Mapleton high school; E. M., University, 1900; instructor in mining, 1900-06; assistant professor of mining, 1906 to 1909; professor to date. With the Ruby Chief Mining Company, Irwin, Colo., 1900; with the Tri-State Development Company, Marquette, Mich., 1903.

McCaslin, Davida, scholar in rhetoric, 1911-12.

McClintic, C. F., assistant in anatomy, 1911-12.

McClumpha, Charles F., assistant professor of English, 1895-1902; professor, 1902-05.

McCloud, Charles N., lecturer on first aids to the injured, college of pharmacy, 1902 to date. Clinical instructor in pediatrics, 1909 to date.

McClure, Lola, assistant in domestic science, 1911-12.

Macomber, Mrs. Olive Briggs, assistant in domestic art, 1912 to date.

McCullugh, T. B., demonstration farm expert, 1913.

McCullough, Ervin W. Born September 11, 1885, St. Ansgar, Ia.; m. Pauline J. Berchem; instructor in mining since 1911; E. M., '11.

McCutcheon, F. W., lecturer on partnership, 1890-91.

McCutcheon, Roger P., instructor in rhetoric, 1913.

McDaniel, Charles, instructor in forge shop, 1902-03.

McDanell, Louise. Born February 16, 1883, near Warsaw, Kentucky; English, Scotch and Irish ancestry; assistant professor of foods and cookery, 1913; B. S., Nashville, '02; A. B., Stanford, '06; research scholar Teachers college, Columbia, 1911-12; M. A. and master's diploma in education, '12, Columbia; instructor in science and mathematics, Andrew college, Cuthbert, Ga., 1902-03; Los Angeles public schools, 1903-05; Corona, Cal. high school, 1906-07; Alhambra, Calif., 1907-11; assistant professor of foods and cooking, State college at Pullman, Wash., 1912-13; member American home economics association, American chemical society, association of collegiate alumnae; Methodist.

McDavitt, Thomas, assistant in ophthalmology and otology, 1894-95.

McDermott, Edward Eugene. Born Fennimore, Wis. Rural schools; Platteville normal, two years; academy of Northwestern, one year; B. S., Northwestern, 1885; graduate work at Northwestern in rhetoric and English, 1889-90; M. S., Northwestern, 1890; special courses in Emerson school of oratory and the Curry school of expression, both of Boston. Taught in rural schools one year; grade and high schools, two years; superintendent of public schools, Lancaster, Wis., two years. Instructor in rhetoric and elocution, 1891-95; assistant professor of rhetoric and elocution, 1895 to February 27, 1908, the date of his death. Organizer of Minnesota state high school debating league, and editor of its reports for past six years. Organizer of Delta Sigma Rho, an intercollegiate forensic honorary fraternity.

McDonald, Hope, instructor in history, 1897-03. Assistant professor, 1903-05.

McDonald, May Cecilia, assistant in domestic science, 1910 to date.

MacDougal, Daniel T., instructor in plant physiology, 1893-95; assistant professor, same, 1895-99; resigned to take up New York City. At the present time Mr. work with the Bronx botanical gardens of New York City. At the present time Mr. MacDougal is in charge of the desert plant investigations for the Carnegie Institution, with headquarters at Tucson, Arizona.

McDougall, William, instructor in crown and bridge work, 1911 to date.

McDowell, Mabel Claire. Born September 21, 1884, Troy, Ohio; American ancestry; instructor in domestic science, school of agriculture, 1913 to date; two years at Michigan agricultural college; graduate from Teachers college, Columbia, '09; diploma in domestic science; five years' experience as teacher; member American home economics association; Lutheran.

McElmeel, Owen P. Born December 5, 1874, Earlville, Ia. Four years in Iowa state normal. LL., University, 1904. Instructor in rhetoric and debate, 1904-07. Member of Delta Sigma Rho.

MacFarland, Fletcher Olin, instructor in physiology, 1911-13.

McGee, John F., special lecturer, college of law, 1902-03; special lecturer on federal and state legislation, 1907 to 1912.

McGill, A. R., St. Paul, regent ex-officio, as governor of the state, 1887-88.

McGregor, May, statistician, office of the registrar since August, 1912. B. A., 1907.

Machetanz, Karl A., director of the gymnasium and instructor in history and arithmetic, school of agriculture, 1904 to 1910.

McIntyre, Mary S., librarian of the school of agriculture, 1900 to 1909, now Mrs. G. C. McClelland.

McGuire, Arthur James. Born July 27, 1874, at Hegbert, Minn.; Irish ancestry; m. Marie McCormick; superintendent of the North Central experiment station at Grand Rapids, Minn., since—; graduate of the school of agriculture, B. Ag., '04; made a special study of a system of farming for the pine timbered section of northern Minnesota, land clearing and dairy stock breeding; has published bulletins numbers 116 and 134 and numerous press bulletins; member of Minn. Agricultural society, Horticultural society, and State dairymen's association; Catholic.

McKay, Jane, registrar's office, assistant, 1904 to 1912. Mrs. Frank G. Lister.

McKeehan, Louis Williams. Born March 31, 1887, Minneapolis American ancestry; m. Grace Rose Badger; assistant in mechanical drawing; assistant in physics; instructor in physics, 1906 to date; two years in U. S. naval academy; B. S. in Engineering, Minn. '08; M. S. '09; Ph. D. '11; research work upon terminal velocity of fall of small spheres in air (joint author with Dr. John Zeleny); the same at reduced pressures; at present is working on scattering of cathode rays; articles in Physical Review, 1910-11; member Sigma Xi, A. A. A. S.; Presbyterian.

McKenney, Maude F., substitute cashier and bookkeeper, department of agriculture, June, 1906, to August, 1907; assistant bookkeeper, August, 1907, to August, 1911; bookkeeper since that date.

Mackintosh, Roger S., assistant in horticulture, 1896-1902; extension horticulturist, 1913.

McLain, Nelson Wylie, director of the experiment station, 1888-1891.

McLaren, Archibald, adjunct professor of gynecology, 1888-92; clinical professor, same, 1892-93; clinical professor of diseases of women, 1893-05; clinical professor of surgery, 1905 to 1913; associate professor, 1913—.

McLaren, Jennette M. Born December 1857, Woodstock, Ill. High school course and short course at normal. Taught six years in public schools. First assistant in obstetrics, 1905-07; clinical instructor in same, 1907 to 1913.

MacLaren, Rita, assistant in domestic science, Crookston school of agriculture since 1910.

MacLean, George Edwin, professor of English language and literature, 1885-95. Called from the University to the chancellorship of the University of Nebraska, remained at Nebraska for— years and was then called to the presidency of Iowa state university, which position he held to 1911, retiring on Carnegie Foundation allowance. Since then has done some special investigations for the U. S. Department of Education. Williams college, 1874, Yale divinity school, 1874. Pastor at New Lebanon and Troy, N. Y. Studied Old English at Leipsig, 1881, and the University of Berlin, 1882-83. Studied at Cambridge and Oxford along line of his specialty. Ph. D. Leipsig.

McManigal, William Allison. University B. A., 1904; LL. B., 1906; scholar in sociology and anthropology, 1904 to 1913.

McMillan, Conway, assistant professor of botany, 1890-91; professor of botany and botanist of the geological and natural history survey, 1891-06. See first edition.

McMillan, Franklin R. Born October 7, 1882, Worthington, Minn.; American ancestry; m. Luvena L. Brockway; instructor in drawing, 1909-10; civil engineering department, 1910-11; experimental engineering department, 1911 to date; C. E., '05; has had five years' experience as construction and irrigation engineer.

McMillan, S. J. R., lecturer on constitutional law, 1888-89.

McMiller, Paul Raymond. Born May 3, 1887, Unity, Wis.; assistant research chemist, 1911 to date; B. C. in chemistry, '11.

Macnie, J. S., clinical assistant in diseases of the ear and eye, 1904 to 1907; instructor to —; clinical professor of ophthalmology and otology to 1913; assistant professor of diseases of eye, ear, nose and throat, 1913.

McVey, Frank LeRond. Born November 10, 1869, Wilmington, Ohio. Public schools of Toledo, Ohio, and Des Moines, Ia.; Des Moines college; A. B., Ohio Wesleyan, 1893; Ph. D., Yale, 1895; principal of high school, Orient, Ia., 1892; instructor in history, Teachers' college, Columbia university, 1896; instructor in economics, University, 1896-98; assistant professor same, 1898-00; professor of economics, 1900-07. Member of Minnesota state tax commission, chairman, 1907 to 1909; since that date president of the University of North Dakota. Associate editor of the American economic association bulletin; director of the Twin-City exhibit, St. Louis, 1904, memmember of the International jury of awards, St. Louis, 1904; President of associated charities, Minneapolis, 1899-07; member of the executive committee of the National conference of charities and corrections. Author of Populist Movement, 1896; The History and Government of Minnesota, 1900; Modern Industrialism, 1904; numerous articles and reviews in the economic and general press.

Magelssen, Solveig Magdalene, scholar in rhetoric, 1911-12.

Magnusson, Gustav Alfred, demonstrator in pathology and bacteriology, 1912-13; instructor in bacteriology, 1913-.

Mahoney, Stephen, Minneapolis. Appointed regent June 15, 1889, and served to March, 1907, having been twice reappointed and serving for eighteen years. Mr. Mahoney graduated from the University in 1877, and was the first alumnus to serve on

the board. Born at Pittsburgh, Pa., in 1854. Came to Minnesota in 1857. Entered the University of Minnesota in 1874 and graduated with honors in 1877. Taught school and studied law. Received LL. B. from Iowa university in 1879. Elected judge of municipal court, Minneapolis, in 1883. Engaged in practice of law in Minneapolis.

Mahood, E. W., instructor in arithmetic and gymnasium, 1895-03.

Main Barn. Erected in 1884, at a cost of $15,000, from the profits on the sale of the first University farm, 75x234 feet.

Main Engineering Building is 231 feet long in the body and 65 feet in least width; in addition there are two wings on the east side of the building, 70x40 feet. The north wing is devoted exclusively to the central engineering library. The south wing is devoted exclusively to well-lighted, large drafting rooms.

The body of the building is of three main floors, above a commodious, well lighted basement, and under this a sub-basement space for pipes and conduits. The architectural style is Italian Renaissance; and the materials used are Colonial brick in masses, with Bedford stone up to the first story and in the cornice and trimmings. The basement is utilized for student welfare rooms. The first floor is largely devoted to recitation and lecture rooms, and to the offices of members of the faculty. The second floor is devoted almost exclusively to recitation, lecture and drafting rooms and offices. A particular feature of this floor is the post-senior civil engineers' room. The building has been constructed with a view of ultimately adding a roof house as the demand for more space for architecture becomes apparent. The building is fully fire proof throughout. With the fans in motion the air is tempered, washed, heated and forced in generous quantities to the various rooms of the building. The building is electrically lighted, drafting rooms and the auditorium utilizing the indirect system. The building was completed and occupied in 1912 and cost $225,000.

Major, E. W., instructor in sweet curd cheese work, 1898-99; assistant in dairy husbandry, experiment station, 1899-02; associate professor of animal nutrition, 1912 to date.

Maland, James Wilhelm, instructor in crown and bridge work, 1911-12.

Maley, Linda Helen. Born June 9, 1879, Faxon, Minn. Rural schools; Minneapolis, east high school; B. A., University, 1901; M. A., same, 1907. Assistant in rhetoric, University, 1901-04; instructor in same, 1904 to 1907. Phi Beta Kappa, Mrs. Frank O'Hara, Washington, D. C.

Malin, N. G., farm foreman, Crookston, 1913-.

Managing Editors of the Ariel. 1877, John H. Lewis; 1878, John F. Goodnow; 1879, A. W. Rankin; 1880, James Jennison; 1881; Frank N. Leavens; 1882, David Percy Jones; 1883, Thomas E. Trusell; 1884, Howard S. Abbott; 1885, Henry J. Grannis; 1886, Frank N. Stacy; 1887, Percy R. Benson; 1888, Arthur E. Giddings; 1889, Patrick Kennedy; 1890, George A. Clark; 1891, Otto K. Folin; 1892, Knut Gjerset; 1893, C. Elon Young; 1894, Arthur L. Helliwell; 1895, Charles H. Topping; 1896, Alexander Caldwell; 1897, Conrad H. Christopherson; 1898, Charles A. Johnson; 1899, Waldron M. Jerome.

Managing Editors of the Minnesota Daily. 1900, Sidney DeW. Adams; 1901, Walter H. Murfin; 1902, Jay I. Durand; 1903, Henry S. Ives; 1904, Charles Gilman; 1905, John P. Devaney; 1906, Edward Hall and Carol K. Michener; 1907, Algernon H. Colburn and Zenas L. Potter; 1908, Zenas L. Potter; 1909, Edward B. Cosgrove; 1910, Harold R. Taylor; 1911, Walter M. West; 1912, Bernard Vaughn; 1913, Allan L. Moore.

Managing Editors of Gophers. A list of managing editors of Gophers will be found in the Gopher of 1907, page 179.

Manchester, James Eugene. Born August 16, 1855, Pitcairn, N. Y. B. S., University; D. Sc., Tuebingen, Germany; studied at Goettingen, one semester; Heidelberg, three semesters; Leipsig, two semesters; Tuebingen, three semesters. Superintendent of schools, various places in Minnesota, five years; professor of mathematics, Vincennes university, three years; President of Vincennes university. Instructor in mathematics, University, 1905 to 1909. Author of Hohere Singularitaten Ebener Kurven. Member of the American mathematical society; member of the Indiana academy of science. Deceased.

Mandolin Club, The. Is an organization of men for the purpose of securing the necessary practice to give public concerts. The instruments used are the mandolin, violin, 'cello and guitar. Public concerts are given, usually in connection with the glee club, both in and out of the city. Practice is kept up during the college year, under the direction of competent instructors. Membership is secured through competitive trials of skill.

Maney, Charles Albert, scholar in astronomy, 1911-12.

Mann, Arthur Teall. Born in 1866, New York City. Minneapolis high school, 1884; B. S., University, 1888; M. D. Harvard, 1895. Taught in Minnesota high schools one year and was superintendent of same for three years.Four years in Massachusetts hospitals; the Channing hospital for mental and nervous cases, 1895-96; surgical service of the Boston City hospital, 1896-98; first assistant physician, Massachusetts hospital, 1898-99; studied surgery in German hospitals in 1904.Assistant in clinical surgery, 1901-03; instructor in clinical surgery, 1903-07; professor of clinical surgery, 1907 to 1913; assistant professor of surgery to date. Author of Hemorrhoids, including an original operation; Tin Splints, the Manufacture and Use, with some original devices; Fractures of the Lower Jaw, including an original method; Rapid Healing in Septic Cases, including the use of iodoform wax in bone cases; Cases of Appendicitis, illustrating some common mistakes in diagnosis; Acute Pancreatitis. Secretary-Treasurer of the Western surgical and gynecological association; Surgeon to the Northwestern hospital, Minneapolis; member of the American medical association; the Minnesota state medical association; the Minneapolis medical club; the Hennepin county medical association; the Commercial club; the Minneapolis club.

Mann, Eugene Langdon. Born May 20, 1861, Minneapolis. Graduate of St. St . Paul public schools and Hobart college, Geneva, N. Y. Professor of physical diagnosis and laryngology, college of homeopathic medicine and surgery, 1888-1902; dean of same 1902 to 1909. Contributor to medical journals. Graduate work in Austria, London and Halle, Germany. Phi Beta Kappa, 881 Fairmont avenue, St. Paul.

Mann, Frederick Maynard. Born May 1, 1868, at New York City; New England ancestry; m. Grace Hitchcock; two daughters; professor of architecture and head of the department of architecture, 1913; B. C. E., '92, C. E., '98, Minnesota S. B., in Arch., '94, S. M. in Arch., '95, M. I. T.; instructor in architecture University of Pennsylvania, 1895-1900; professor of architecture, Washington University, 1902-10; professor of architecture, University of Illinois, 1910-13; practicing architect at Philadelphia, 1898-1902; practicing and consulting architect, 1902-13; member of American Institute of Architects; St. Louis Architectural Club, S. P. E. E.; Sigma Xi, College Art Association; Presbyterian.

Manson, Frank M., instructor in animal biology, 1894-97. Graduate of the University class of 1894; M. S., 1895; Med., 1899. Now a practicing physician at Worthington, Minn.

Marchant, Grace B., record clerk, office of the registrar, since August, 1912.

Marshall, William R., St. Paul. Regent, 1851-52. Ex-officio member of the board, 1858-59. Appointed, 1873, and three times re-appointed, resigned January 31, 1882.

Marston, Moses. Born in Williamstown, Vermont, in 1832. He graduated from Middlebury college in 1856, and for many years was a Universalist minister. He was subsequently called to the professorship of Latin and Greek in St. Lawrence university, New York, where he remained several years. About 1874 he was forced to resign his position on account of ill health, and came to Minneapolis, hoping that a change of climate would be beneficial. For a time he preached in the Church of the Redeemer, in Minneapolis; was elected to the professorship of English in the University in 1874, which position he filled until his death, July 11, 1883. His friends and pupils raised a fund of $1,000 to endow a scholarship in English in his honor. This scholarship is known as the "Moses Marston scholarship," and is awarded annually.

Martenis, John Vansickle. Born November 18, 1872, at Danville, Warren Co., N. J., German-English ancestry; m. Katherine Weldin; one daughter and one son; instructor in mechanical engineering, 1906 to 1908; assistant professor of same since 1908; M. E., Lehigh University, '94; experience as designer of automatic machinery with Sargent & Co., of New Haven, Conn., and shop foreman at Baldwin Locomotive Works of Philadelphia, Pa.; was assistant chief engineer at Girard college, Philadelphia, Pa.; research work in the investigation and determination of form and material for nozzle to be used in sand blast machine; has done considerable work as consulting engineer; member A. S. M. E., Society for promotion of engineering education; Sigma Xi, Alpha Kappa Sigma; affiliated with Baptist church.

Martin, Mac, professorial lecturer in advertising, 1913.

Martin, Thomas R., demonstrator in pathology and bacteriology 1909-11.

Martin, Wallace H., born April 19, 1885, Kandiyohi county, Minn.; Scotch ancestry; m. Edna A. Bruce; one son; instructor in mechanical engineering since 1912; M. E. '10; experience with the Oliver Iron mining Co., and the Hart Parr Co.; publication, Protective coatings for iron and steel, Min-

nesota engineer Nov. 1911; member, Tau Beta Pi, A. S. M. E., Presbyterian.

Masquers (Dramatic Club) was established in 1898 and has a membership of thirty. Its purpose is to produce foremost modern and classic drama. Plays are produced twice a year under the direction of a qualified dramatic coach. Owing to the fact that the University has no really suitable place for giving these productions, these have in the past been given over town. See dramatic club.

Matchen, Robert D. Professor (homeopathic) of the principles and practice of surgery, 1888 to 1909; senior professor of same.

Mathematics Museum. The collection includes the Schroeder wooden and the Schilling gypsum string and paper models for solid analytical geometry, many of the Schilling models for illustrating the theory of surfaces, several of the Schilling mechanical devices for describing various loci, the Keufel and Esser models for solid geometry, and the large slated globes, suitably mounted, for use in spherical geometry and spherical trigonometry.

Matthews, Harriet. Bookkeeper, department of agriculture, November 1900 to March 1910; cashier since that date.

Matson, Jessie, assistant in physical training for women 1911-12.

Matthews, Charles H., assistant in poultry husbandry 1909 to date.

Matthews, Mary L., instructor in domestic art 1909-11.

Maves, Herman A. Instructor in operative dentistry, 1907 to 1912; assistant professor of operative dentistry to date.

Maybury, Richard Samuel, instructor in operative dentistry 1911 to date.

May Fete. The first May Fete held at the University occurred on the afternoon and evening of May 18, 1911. A full report of the event will be found in the Minnesota Alumni Weekly of May 22, 1911 and also in the Gopher of 1913 which contains a large number of half tone cuts illustrating various events and scenes of this notable occasion. The idea of the May Fete was first suggested by Eleanor Sheldon, '04, who was ably assisted by Elizabeth Ware, '11. The business management of the affair was in the hands of Byron Shepard, '11 and Audrey Smith, '09. Mrs. George Edgar Vincent who appeared as Queen Elizabeth headed the procession.

May Fete Scrap Book. Compiled by Audrey N. Smith and deposited in the University library.

Mayo, E. D. Instructor in mechanical drawing, 1886-87.

Mayo, William J., Rochester. Appointed regent 1907, re-appointed 1913, term expires 1919. Born 1861, LeSueur, Minn. Private schools of Rochester and medical department of the University of Michigan, M. D., 1883. Specialist in surgery which he has practiced at Rochester since 1883. Member of the firm of Drs. Mayo, Graham and company. Member of the American medical association, president 1906-07; Minnesota state medical association; Olmstead county medical society, etc.

Mayne, Dexter Dwight., born May 14, 1863, Beetown, Wis. State normal school, Plattesville, Wis.; some work at the University of Wisconsin; other institutions. Taught one year in country school; one year in graded school; principal of Fennimore, Wis. high school one year; same for Elkhorn high school, five years; same for Fort Atchinson high school, four years; principal and superintendent, Janesville, Wis. schools, seven years, also one year in schools of Ishpeming, Mich. Two years experience as a commercial traveler; practical farm experience; conducted summer schools and institutes for a number of years Principal of the school of agriculture since 1902; also instructor in farm mathematics, civics, and economics; instructor in elements of agriculture, college of education, 1906 to 1909; professor of agricultural economics to date. Author of Modern Business Speller; Geography of Wisconsin (Morton's); Office Methods and Business Practice, parts I and II; The Old Fort at Fort Atkinson; First Principles of Agriculture (with Professor Goff); Mayne's Sight Speller; Modern Business English(with C. J. Smith); other publications in preparation.

Mead, Arthur R., acting assistant professor of education 1911-12.

Mead, Marion A. Assistant in laryngology, 1902-05.

Meade, Charles J., clinical instructor in medicine 1909 to date.

Meat House. Erected in 1901, at a cost of $7,500. It provides accommodations for one hundred and twenty students in the lecture room. The killing and cutting rooms on the main floor are well adapted to large details for practice work, and the basement curing rooms offer excellent opportunity for training in this branch of the work. The store rooms are refrigerated by the ammonia process and are so arranged that work started by a student at any time can be held almost indefinitely.

Mechanic Arts Building. This building was erected in 1886, at a cost of $51,500, including equipment. It was remodelled and a large addition made to it in 1903, at a cost of $10,000. It is constructed of red pressed brick with red sandstone trimmings and is a three story and high basement building. Originally it was used exclusively for the housing of the college of engineering. With the growth of that college and the addition of other buildings, this building was finally abandoned by that college, at the end of the college year

1911-12. The building was then turned over to the department of political science and economics and the University extension service of the University. The building is in no sense fire proof or even slow burning construction, it is antiquated and hardly suitable for any University use, endangering, as it does, all material that may be housed in it. It provides about thirty thousand square feet of floor space and provides quarters for the superintendent of buildings, inventory clerk, post office, and storage of supplies for the University.

Meck, Ethel B. Assistant in registrar's office, department of agriculture, October 1910 to January 1912; assistant registrar since that date.

Medals. The Alumni Weekly gold medals, the Briggs medals, the Rollin E. Cutts medal.

Medical Campus. With the acquirement of the new campus, the board of regents set apart the two and one half blocks lying between Union and Church streets and bounded north and south by Washington avenue and the Mississippi river, for the site of the new medical buildings. It is expected that ultimately the entire medical group will be placed on this new medical campus, for which the faculty and Alumni, by a fund of $42,000, secured by the contributions of citizens of Minneapolis, helped to provide.

Medical School. This school was authorized by the charter of the University, and as early as 1873 agitation for its organization had begun. Not until 1882, however, did the question assume definite form. It was then brought to the attention of the board of regents by a communication from Dr. Charles N. Hewitt, secretary of the state board of health. As a result, a resolution was adopted by the board authorizing the appointment of a committee consisting of Dr. Chas. N. Hewitt, Dr. Wm. H. Leonard, and President Wm. W. Folwell, instructed to prepare plans for the establishment of such a school. The committee's report recited the then present conditions of medical education and recommended the creation of a faculty whose duties should be those of an examining, licensing and degree-conferring board; before which each candidate to practice medicine in the state should appear for examination, as to his literary and scientific qualifications and his professional fitness. This report was adopted and the faculty, as an examining body, was appointed January 5, 1883. Under this form of organization the school existed until 1887, conferring upon nine candidates the degree of bachelor of medicine.

On the 7th of April, 1887, a committee, consisting of Dr. D. W. Hand, Dr. Chas. N. Hewitt, and Dr. Perry H. Millard, waited upon the board of regents, and urged the establishment of a teaching school of medicine. The question was referred to a special committee of the board of regents and at a meeting of the board on January 28th, 1888, representatives of the board of trustees of the Minnesota Hospital college and of the St. Paul Medical school tendered to the regents the use of their properties, for a period of five years, and agreed to the surrender of their respective charters in order that a medical school of high grade might be established in the state. The offer was accepted by the board.

In March 1888, the board of trustees of the Minnesota Homeopathic Medical college voluntarily surrendered its charter and offered to provide temporary quarters for a homeopathic college of medicine, if the regents would establish such a school. This offer was accepted.

One committee was appointed to nominate a faculty for the college of medicine and surgery and for the college of dentistry, and another to nominate a faculty for the college of homeopathic medicine and surgery. These three colleges were combined in one department of medicine, and were open to students in the fall of 1888, classes being conducted in the building later occupied by Asbury hospital, at the corner of 6th street and 9th avenue south. Dr. Perry H. Millard was appointed dean of the department. For four years, instruction was given in these quarters and, in 1891, the legislature appropriated $80,000 for a medical building to be erected on the University campus. This was completed in season for the opening of the session of 1891-92, and was later named Millard hall.

With the removal of the department to the University campus a change in administration was demanded. Each of the colleges constituting the department was given its own dean. Dr. Millard was continued as dean of the college of medicine and surgery, Dr. H. W. Brazie was appointed dean of the college of homeopathic medicine and surgery, and Dr. W. Xavier Sudduth, dean of the college of dentistry. Later, the college of pharmacy was organized and added to the group, and Dr. Frederick J. Wulling was installed as its dean.

Dr. Millard filled the deanship of the medical school until his death in 1897; he was succeeded by the late Dr. Parks Ritchie, professor of obstetrics, who held the office until 1906. Upon his resignation, Dr. Frank Fairchild Wesbrook was chosen and conducted the school until the spring of 1913, when he resigned to accept the Presidency of the University of British Columbia. His place has been filled by the selection of Dr. Elias Potter Lyon, formerly dean of the St. Louis University Medical school.

The college of homeopathic medicine and surgery was maintained until the year 1909, when it was abolished by vote of the board of regents.

In the year 1908, the Minneapolis College of Physician and Surgeons, affiliated until then with Hamline University, was

merged with the medical school of the University, which undertook to complete the teaching of its matriculants and to recommend them to Hamline University for the degree.

In the spring of 1913, the medical school was reorganized by direction of the president and the board of regents. Its chairs were grouped into eight departments, as follows: anatomy (including histology, embryology, gross anatomy, neurology, etc.); physiology; pharmacology; pathology; public health and bacteriology; medicine (including pediatrics, and nervous and mental diseases, as divisions); surgery (including the divisions of dermatology, genito-urinary diseases, orthopedics, and eye, ear, nose, and throat); and obstetrics (including gynecology).

The new faculty numbers 46 professors and 28 instructors. A force of laboratory and clinical assistants, numbering 26, is without membership in the faculty. The direction of the school is entrusted to an administrative board consisting of the dean and the secretary of the medical school, the superintendent of hospitals, the heads of the departments and of one member elect chosen by the faculty at large.

Seven and eight year courses are offered to students of medicine. In the former, the minimal requirement of two years in a recognized college of science, literature and the arts, followed by the first two years in medicine, leads up to the degree of B. S. In the latter, three years in the college of science, literature and the arts, followed by the first year in medicine, lead to the degree of B. A.

Under either of these courses, two years in general chemistry and qualitative chemistry, one year in biology, physics and rhetoric, and a reading knowledge of French or German are required.

The first two years in medicine are devoted to the study of the fundamental medical sciences, including anatomy, physiology, pharmacology, bacteriology, pathology and the principles of medical diagnosis. The second two years take up the study of clinical pharmacology and pathology, and of medicine, surgery and obstetrics in theory and practice. Their work is essentially clinical in method and is very largely pursued in the hospitals and dispensaries owned by or affiliated with the school.

The fifth year in medicine, precedent to the granting of the degree, may be taken in a standard hospital interneship or in advanced work in the laboratory field.

The tuition fee is $150 a year for each of the first four years in medicine. No fee is charged in the fifth year.

A summer school of medicine, opened in 1913, offers courses of six weeks duration in the laboratory branches and in the clinical field, which may be made contributive to a degree.

Courses in public health are being inaugurated, with a view to the training of both medical and lay health officers.

In the twenty-five years of its history, the medical school has graduated 1,082 doctors of medicine. Its enrollment for 1912-13 numbered 191.

Medicinal Plant Garden. See Minnesota Alumni Weekly of May 19, 1913.

Meeds, Alonzo D. Instructor in chemistry, 1890-94. Graduate of the University class of 1889.

Meeker, B. B., St. Anthony. Regent 1853-56.

Melcher, William P. Instructor in German, 1873-74.

Melom, Carl Marcus, born June 6, 1874, Franklin, Minn.; Norwegian ancestry; m. Emma Jane Taylor; one son and one daughter; taught for a number of years in the government schools in the Philippines; scholar in French 1904-05; instructor in French and Spanish since 1905; Presbyterian.

Memorial Day. Since 1899 the University has observed Memorial Day by providing for the decoration of the graves of students who lost their lives in the Spanish American war. The idea originated with Professor Arthur Edwin Haynes who provided silk American flags to be placed on the graves of all students who lost their lives in the Spanish American war.

Menorah Society was established in 1904 and has a membership of 125. Its purpose is to study Jewish history and culture, to promote Jewish ideals, and to discuss Jewish problems. Its activities include business meetings, lectures by members of the faculty or others, papers by student members and a limited number of social functions during the year, including a play, a banquet and a dance. This was originally organized as the University Jewish Literary Society.

Mercer, Hugh Victor, born January 26, 1869, in Marion county, Illinois; son of Silas and Caroline Gaston Mercer; m. Edith Huling Crawford; one daughter; lecturer on jurisprudence in college of law 1906 to 1912; lecturer on practice in U. S. courts to date; Minn., L. L. B., '94, L. L. M. '97, D. C. L., '11; president of the Minnesota Employes' Compensation commission, charged with preparing a code for workmen's compensation for injuries received by accident in the course of employment. Mr. Mercer is a pioneer in this line and served on the first committee of the State Bar association to draft a similar bill. Mr. Mercer called the first convention of members of similar commissions in other states which was held in Atlantic City July 1909, and was elected secretary of the convention. His argument on the constitutionality of such legislation, made at this convention, is said to be the most compre-

hensive ever presented on the subject, and at the request of the labor leaders was printed for general distribution. Member board of directors of the General Alumni Association, the Minneapolis, Commercial, Minikahda and University clubs, Minnesota state bar association; affiliated with the Christian church.

Mercer Prize. Mr. H. V. Mercer, of Minneapolis, offers three medals to be awarded annually, to the three winning debaters in a law school debate, or series of debates, to be conducted under rules laid down by the law faculty. The medals were offered first in the spring of 1912.

Meredith, Virginia C. Preceptress of the school of agriculture, 1897-99; also professor of home economics, 1899-03.

Merriam, William R., St. Paul. Regent ex-officio, as governor of the state, 1889-1892.

Merrill, Rev. Elijah W. First principal of the University, was born in Conway, N. H., in 1816. Died in Minneapolis, February 15, 1901. Graduate of Wesleyan university (Conn.), taught at Port Huron, Mich., afterward Albion college, Mich., of which he was, for some time the principal. He was called to take charge of the preparatory department of the University in 1851, and actually opened a school on the 26th day of October of that year, in a small building, erected by public subscription, on or near the site of the old exposition building. The school was carried on by Mr. Merrill for four years, he paying all of the expenses, including his own compensation out of tuition fees received. Mr. Merrill was the chief mover in calling and organizing the first teachers' association of the territory and was superintendent of public instruction for one year, parts of 1854, 1855. He was ordained a Congregational minister in 1863, and was pastor of various churches in this state until his health failed him in 1875, when he was obliged to give up his work. See Ariel, 1891.

Merrill, Nell E. Clerk principal's office, agricultural department, since January 1912.

Merriman, Orlando C., St. Anthony, Minneapolis. Regent March 4, 1864-February 18, 1868; March 1868-January, 1871. Member of the special board to which board the task of righting the tangled affairs of the University was referred March 4, 1864.

Merriman, William H. Instructor in machine work, 1900-07.

Mersen, Alice Margaret, assistant in agricultural chemistry 1912-13.

Merwin, T. Dwight. Lecturer on patent law, 1889-99.

Metcalf, Katharine B. Assistant in English and librarian of the Crookston school of agriculture, 1913.

Methley, William, lecture assistant in chemistry, 1911-.

Metzinger, Leon, assistant in German, 1909-10; instructor in German to date.

Meyer, Adolph Frederick, born February 28, 1880, Cedarburg, Wis.; German ancestry; m. Ethel R. McGilvra; one daughter; professorial lecturer in hydraulic engineering 1913-; B. S. Wis.; '05; C. E. same, '09; seven years in government service; one year in private practice; research work in connection with practice; result of research work published in engineering periodicals; member, Tau Beta Pi, associate member A. S. C. E., member association of engineering societies, Study club; Protestant.

Meyer, Arthur W., assistant professor of anatomy, 1907-08. See first edition.

Mikesh, James Stephen, instructor in mathematics 1909 to 1913.

Miles, A. D. E. Demonstrator in charge of prosthetic clinic, 1891-93.

Military Drill. The act of Congress of 1862, providing for the establishment of "Land grant colleges," requires that instruction be given in miltary science and tactics at all institutions that are its beneficiaries. The Armory is located on the University with the necessary arms, equipties usually provided in a modern Armory. The United States government supplies the University campus and has all the facili-

ment and ammunition for instruction in infantry and artillery drill, and details a commissioned officer of the regular army to take charge of the department.

The office of professor of military science and tactics has been held by the following named gentlemen: Maj. Gen. R. W. Johnson, (retired), 1869-71; Maj. F. L. Huggins, 1872-75; Lieut. John A. Lundeen, 1876-79; Professor O. J. Breda, who came to the University as professor of Scandinavian, in 1884, conducted work in military drill, for some time; Lieut. Edwin F. Glenn, 1888-91; Lieut. Geo. H. Morgan, 1891-94; Lieut. Harry A. Leonhaeuser,

1895-98; Cadet Major Frank M. Warren, Minn. '99, held the office for 1898-99; Cadet Maj. Edward Wiltgen, for 1899-00; Cadet Maj. Walter J. Allen, for a part of 1900-01; Lieut. Hayden S. Cole, (retired) 1901-03; Maj. Geo. H. Morgan, 1903-05; Capt. Edward Sigerfoos, 1905 to 1909; Capt. Sigerfoos, was recalled for a few months, in 1906, and during his absence, the cadets were commanded by Cadet Lieut. Col. Charles P. Schouten; Captain Sigerfoos was followed by Captain, afterward Major Edmund L. Butts, who remained in charge until 1912 when he was succeeded by Lieut. J. B. Woolnough. See Forty Years of the University of Minnesota, pages 200-205.

Military encampments. The first military encampment at the University was held under the direction of Captain Edmund L. Butts during examination week in the fall of 1910. This camp was known as the Cyrus Northrop camp. The agricultural school cadets held a similar encampment in the week preceding the opening of work at that school. The following year the camp was known as the William W. Folwell camp. The 1912 camp was known as the John A. Johnson. The encampment of 1913 is to be known as the T. A. P. Howe camp, in honor of the first University man who lost his life in a battle near Manila, September 16th, 1900.

Millard Hall, New together with The Institute of Anatomy, was authorized by the legislatures of 1909 and 1911, under appropriations of $266,400, for the building, and $60,000 for its equipment. The building has three stories, with high basement and roof-house. It is built of Danville brick with Bedford Stone trimmings and conforms to the general plan of the new campus University. It is thoroughly fireproof, its interior construction being of brick, concrete and tile. Its floor area is approximately 82,455 square feet. It is provided with thoroughly modern ventilating, air-purifying, electric-lighting, and vacuum-cleaning systems.

Primarily a laboratory building, it is planned essentially as a workshop and its equipment is designed for the development of a maximum of service along both teaching and research lines. The basement contains machinery rooms, store-rooms, preparation rooms, galvanometer room, combustion room, photographic rooms, locker room, students' lounging room, and a series of workshops intended to serve the manufacturing and repair needs of the medical school.

The first floor is devoted to the Dean's offices, the faculty room, the clinical library, lecture-room, and the offices and laboratories of the department of medicine. Upon the second floor are the offices, research rooms, and library of the department of surgery; the offices, and students' and private laboratories of the department of pharmacology; laboratories for graduate study in physiology and physiologic chemistry; and a lecture-room. The third floor contains the offices of the secretary of the medical school, and is otherwise wholly occupied by the department of physiology, with three large students' laboratories, two supply rooms, balance room, four special sense laboratories, the department library, a demonstration room and and four private laboratories.

The roof-house is designed for the housing and care of animals and for operative and research work in which animals are employed. It has a number of study rooms; frog and turtle aquaria, rabbit, guinea-pig and monkey houses, rat and mouse cages, quarters for larger animals, an incinerator, and feed rooms. Surrounding the entire roof-house, is a wide parapetted corridor in which the animals are permitted to exercise freely.

The entire building is supplied with hot and cold water, high pressure steam, compressed air, gas and both alternating and direct currents for power.

The two new medical buildings are situated on the new campus fronting on a common court and flanked by Washington, Union and Church streets.

Millard Hall (old). See pharmacy building.

Millard Medical Library. By the bequest of the late dean, Perry H. Millard, M. D., who bequeathed his entire private medical library to the department, the department came into possession of a collection of several hundred volumes and pamphlets, including many rare and old medical works, sets of journals especially rich in surgical works.

Millard, Perry H., born in New York, 1848. Graduate of Ogdensburg educational institute. Began his medical practice in 1872. 1881-82 studied at Medical college in London. One of the chief movers in the organization of the department of medicine; dean of the department, 1888-92; dean of the college of medicine and surgery from that time till his death in 1897; professor of the principles of surgery and medical jurisprudence. Medical Hall was named "Millard Hall," in his honor by the board of regents in 1906.

Miller, Lee, assistant in mechanics, 1912 to date.

Miller, P. E., born at Cedar Rapids, Ia.; B. S. in agriculture; Ames; had experience on farm previous to college training; agronomist at Morris school of agriculture since 1911.

Miller, Stephen, Windom. Regent ex-officio, governor, January 11 to March 4, 1864.

Mills, Eugene C., instructor in mining, 1896-99.

Miner, James Burt, born October 6, 1873, Berlin, Wis.; American ancestry; m. Jessie Lightner Schulten; one son; assistant in psychology, 1900-01; instructor in psychology, Illinois, 1903-04; instructor in philosophy, Iowa, 1904-05; assistant professor of philosophy, same 1905-06; assistant professor of psychology, since 1906; B. S. '97; L. L. B. '99; M. S. '01; Ph. D., Columbia, '03; fellow in psychology at Columbia, 1902-03; experience as reporter on St. Paul Dispatch and Spokane Evening Chronicle; research work, problems in delinquency and mental development; publications, Motor, visual and applied rhythms; A case of vision acquired in adult life; The college laggard; A vocational census of college students; member, Phi Beta Kappa, Sigma Xi., Delta Sigma Rho, Ariel board, senior president class of '97, Amer. Psychol. association, fellow A. A. A. S., M. E. A., Minn. acad. social sciences, Campus club, Phi Delta Kappa, secretary of the Minnesota chapter of Phi Beta Kappa; Congregationalist.

Minerva Literary Society was established in 1895 and has an invitation membership of thirty young women. Its activities are literary and social.

Mines, School of, The. This school was established in 1888. It existed as a separate organization until 1891, when it became an integral part of the college of engineering, metallurgy and the mechanic arts. In 1896, another reorganization took place and the school of mines was made an independent organization with its own course of study, faculty and in 1900 William R. Appleby, professor of metallurgy, was made dean. Up to 1913 this college was housed in the school of mines building and the ore-crushing plant, both located on the river bank. The mining building was destroyed by fire, February 14th, 1913 and is to be rebuilt for the college of education. The legislature of 1913 appropriated $145,000 for a new mining building which is to be erected to the north of the open court between the laboratory of experimental engineering and the main engineering building. The school was cared for temporarily in the main engineering building. The school is one of the best equipped on the campus and enjoys the advantages which come from an intimate connection with the mining experiment station established in 1911. Admission to this school is on the basis of graduation from an accredited high school, but students who are unable to pass an examination in mathematics are required to take a five-year course to receive their degree. The work of the course furnishes a thorough foundation in general engineering as well as special instruction in mining engineering. Two trips for field work are required of all candidates for graduation—one at the close of the sophomore year and another at the close of the junior year. The degrees granted in this course are, engineer of mines and metallurgical engineer. The school has granted since its organization the following degrees Bachelor of mining engineering, 6, Mining engineer, 10, Engineer of mines, 196, Metallurgical engineer, 4. In addition to twelve professors, assistant professors and instructors who devote their whole time to the work of the school instruction is received in common with students in other colleges in subjects that are common to both.

Mineral Lands and Leases. The University still owns 19,303.9 acres of the land originally granted by the national government for its endowment. Some of these lands are located on the Iron Range. 114 40s are known to be in the iron bearing district and 40 are in the Biwabik formation, which is the richest in iron. Twenty-two leases on this land, covering a total of 2,400 acres, with an estimated merchantable tonnage of over five million tons, are in force at the present time and 134 have been cancelled. The total receipts from royalties on ore taken from this land to November 1st, 1912, was $110,595.95: the annual addition to the endowment of the University, from this source, is now about $100,000. It has been variously estimated that the University will receive, eventually, from these lands an endowment of anywhere from twenty to forty million dollars.

Mining Experiment Station. Established by the legislature of 1911. The purpose of this station is, (1) To promote the development of the mining and mineral resources of the State. (2) To assay specimens of ores, rocks, clays, and minerals free of charge, subject to the necessary regulations imposed by the board of regents. (3) To make mining and metallurgical experiments in the treatment of such substances and in the utilization of mining and metallurgical by-products. (4) To investigate methods of mining and the use of explosives. (5)To undertake such other work as may seem desirable. (6) To make all ore estimates for the tax commission and to do such other work along the lines above outlined as may be requested by the other state departments.

The first report published by the station was a report upon Iron Mining in Minnesota, by Professor van Barneveld in the spring of 1913.

Mining and Metallurgy Museum. A museum of mining and metallurgy is located in the School of Mines Building. Representative ores of all the most important metals, drawings, photographs of furnaces, sectional furnace models and samples of all the different furnace products are exhibited to the public and are used as illustrative material for regular classes. Various mine appliances, pieces of machinery, underground photographs, models of mine timbering with sectional maps of some of the large Minnesota properties, complete the collection. A collection begun will include ores from all the important mines on the Mesabi range. The samples with analyses show well the character of ore produced by the State.

Minneapolis Life Underwriters Association Prize. A prize of fifty dollars offered by the Minneapolis life underwriters association for the best essay on life insurance written by a senior of the class of 1907, was awarded to Earl W. Huntley.

Minneapolis Steel and Machinery Company Scholarship. Beginning with the college year 1912-13, the scholarship of $500.00 created by the Minneapolis Steel and Machinery Company was available for work by a graduate student in the laboratories of the college of engineering. The subject upon which work will be carried on is to be determined by agreement between the company and the college.

Minneapolis Tuberculosis Committee Fellowship in Economics. Chester Roy Adams appointed 1909-10.

Minne-Ha-Ha was established in 1908 and is published by an association of students whose membership includes all paid-up subscribers to the publication. Its purpose is to present to the students of the University the humorous and optimistic side of college life, and to arouse and stimulate the interest of the students in issues of importance. The magazine is published once a month during the college year.

Minnehaha, The. The co-educational literary society of the school of agriculture.

Minnesota (American Commonwealth series). In 1909 the Houghton, Mifflin Co. published Dr. Folwell's book on Minnesota in the American Commonwealth series. The book fills 382 pages. This is not an abridgement of the larger work which Dr. Folwell has in preparation on Minnesota but an independent history of the state.

Minnesota, The. This literary society for men of the school of agriculture was established 1905.

Minnesota Academy of Social Sciences, The. This is not a University organization, but its members are so largely University men that it is included in this dictionary. Organized in the spring of 1907. The purposes of this organization, as stated in its constitution, are: (a) The encouragement of the study of economic, political, social and historical questions particularly affecting the state of Minnesota. (b) The publication of papers and other material relating to the same. (c) The holding of meetings for conference and discussion of such questions.

Minnesota Alumni Weekly, The. The Weekly was started just before commencement in June, 1901. It was the idea of those back of the movement to publish the Weekly by picking up, bodily, items of news from the Minnesota Daily, that would be of special interest to the alumni. The project met with such an enthusiastic reception that it was found possible to issue it as an independent publication, using only a very limited amount of material picked up from the Daily. The Weekly was started by its first and present editor, E. B. Johnson, '88, whose personal property it was until the spring of 1906, when he turned it over to the board of directors of the general alumni association. It is now the official publication of the general alumni association. It is issued weeky during the college year, from September to June. The first number was issued September 14, 1901. Sixteen pages and cover. Subscription price $2.00 a year.

Minnesota Alumni Weekly Gold Medal, The. This medal is provided by the Minnesota Alumni Weekly and is awarded annually by the faculty committee on debate and oratory to that student who has made the best record in forensics during his college course. This committee has established certain general principles which are to govern the award of this medal, as follows: The medal shall only be awarded to a student who has shown himself broad-minded, unselfish, willing to work courteously and enthusiastically, so as to best serve the interests of debate and oratory in the University and bring credit to his alma mater and incidentally to himself. The recipient must be a type and a model, as nearly as the student body offers such a candidate each year, of what a man may make himself through diligent application to the duty next at hand.

The first medal was awarded to John P. Devaney, on commencement day 1907; subsequent awards have been made to Stanley B. Houck, 1908; Max Lowenthal, 1909; Sigurd H. Peterson, 1910; Not awarded in 1911; Matthias N. Olson, 1912; and Herbert J. Burgstahler, 1913.

Minnesota Association for Research, The. This association was organized March 9, 1907. Professor Gerould, the librarian, was the permanent secretary of the organization and the chief executive officer and is to provide a presiding officer for each of the seven meetings to be held each year. The purpose of the association is the encouragement and prosecution of original research at the University. This society has not been active since 1909.

Minnesota Botanical Studies. Published by the staff of the botanical department, as a report on the botanical division of the State geological and natural history survey.

Minnesota Daily is the official student newspaper of the University. It was established in 1900, the first number being published May 1st of that year. The editorial staff is composed of men and women chosen by competition each year from the undergraduate body. It is the successor to the weekly publication, The Ariel. Published daily, except Sunday and Monday, during the college year. Subscription price two dollars.

Minnesota Daily News. This publication was started by a rival student organization, in December, 1903, who felt that the Minnesota Daily was not filling the field which it should occupy. After a few months this publication was combined with the Minnesota Daily and has been issued under this name since that date.

Minnesota Debating Board. This board is provided for in the constitution of the debating and oratorical association of the University of Minnesota. It is made up of four faculty and five student members, (the faculty members holding the balance of power), and has charge of all matters connected with the student activities in these lines. The faculty members are appointed by the faculty of the college of science, literature and the arts.

This board is the result of evolution running through many years. It was originated in the idea of those most closely connected with debate, in the department of rhetoric, that all departments of the University were interested in this line of work and that all departments were, in a sense, responsible for the proper training of the teams to represent the University. An effort was made to enlist the aid of other departments and the debating board, composed as above, is the outgrowth of this movement. It is the logical, and probably the lineal descendant of the old oratorical association, organized in 1880 and which had charge of oratorical events down through 1897-98, when it was succeeded by the debating board created under a new organization. In 1896, the Federated literary societies undertook to look after debating interests. Up to that time debate had received little encouragement and had no organized backing.

Minnesota Engineer, The. Successor to the Minnesota Engineers' Year Book. Established in November 1908 and has been issued as a quarterly since that date. Vol. IV of the quarterly has just been completed; the whole number, including the annual, is 21. The character of the publication continues practically the same as when an annual—it includes articles by faculty, students and alumni who are engaged in lines of work of special interest to others engaged in similar lines of work.

Minnesota Farm Review, The. A monthly agricultural paper owned and published by the Alumni association of the school of agriculture. The paper is intended to be a medium by which the former students of the institution shall be kept in touch with each other and also with the school and experimental station. It also endeavors to bring the farmers throughout the state, generally, into closer connection with the institution and to this end strives to present the latest progress in experimental work at the various stations. It is the official organ of the Alumni association and of the Farmers' club. The paper was established in 1896 as The Farm Students' Review; the name was changed in 1908.

Minnesota Forester. This publication was established in January 1908 and in 1911 was renamed the North Woods, which is now in its second year. The publication is edited by the Forestry department of the University for the Minnesota State Forestry association, of which it is the official publication. The publication is devoted to furthering the interests of forestry, especially farm forestry.

Minnesota Literary Union, The. See "Federated Literary Societies."

Minnesota Magazine, The. This publication was started in the fall of 1894, by a close corporation of members of the senior class of the college of science, literature and the arts. A monthly literary magazine. Price $1 a year. In 1906 the magazine was changed so as to make its board of editors elected by the subscribers, from members of the senior class.

Minnesota in Manchuria. In the spring of 1908, E. C. Parker, Ag. '05, then a member of the faculty of the department of agriculture, was appointed by the United States Government, at the request of the Chinese government, to be expert agricultural adviser to the Manchurian government. The appointment was for a period of years. Mr. Parker was accompanied on his mission by W. H. Tomhave, Ag. '07, at that time in the live stock department of Pennsylvania State College.

Minnesota Medical Monthly, The. (Homeopathic) was established in 1887, was published, as a college magazine, for about four years. Edited by Dr. W. E. Leonard.

Minnesota Rifle Club was established January 10, 1911 and has a membership of 124 from the cadet corps. Its purpose is to encourage military shooting among the male members of the University. Its activities include indoor and outdoor range practice, competitions with other colleges, and with the National Guard of the Twin Cities. The qualifications are in accordance with the rules of the War department at Washington, D. C. In the number of men qualified for membership Minnesota has more marksmen than all other colleges and universities put together. In

1912 had 113 while all other colleges combined had but 96.

Minnesota Seaside Station. This station was established in 1901 and was maintained through the summer of 1907. It was established by the department of Botany upon four acres of land owned by Professor Josephine E. Tilden. It was located on Vancouver island, on a little cove at the entrance of the straits of Fuca, nearly opposite Cape Flattery. The post office is Port Renfrew, sixty miles north of Victoria. The station never had any official connection with the University though used in connection with the work of the department of botany. It served as an experiment station for the department, affording excellent opportunity for the study of marine botany. During the years it was maintained classes were organized and work carried on continuously during working hours so that great deal was really accomplished, though the time spent at the station was but brief. As a result of this work two volumes of Postelsia have been published.

Minnesota Section of the American Institute of Electrical Engineers meets once a month alternately in St. Paul and Minneapolis. Students of the college of engineering are welcome at these meetings.

Minnesota Songs. Published in 1911 by Hinds, Noble & Eldridge. The book was compiled and edited by W. W. Norton, '99, director of music at the University of North Dakota who was backed by the class of 1911 who adopted the book as a class memorial. The book contains about thirty Minnesota songs and a collection of college songs popular at Minnesota.

Minnesota Stories. A volume of twenty typical University stories chosen mainly from the Minnesota Magazine and published in 1903 by the H. W. Wilson Company. Maroon cloth with half tone plate.

Minnesota Trees and Shrubs. Prepared by Professor Clements and published as volume number nine of the botanical survey series, in the fall of 1912.

Minnesota Union, The. The movement for a men's building, which resulted in the organization of the Minnesota Union, started in the spring of 1908. Max Lowenthal and John F. Sinclair were the leaders in this movement. A ten-day campaign among the students among the students resulted in securing $25,000 in pledges for the construction of a men's building. The constitution was adopted May 5th and an election was held and a board of governors chosen. The first thing to engage the attention of the board was the proposition for a men's building. Plans for a building, submitted by Lowell A. Lamoreaux, '87, were adopted and a campaign launched to secure a building, by popular subscription, as a testimonial to President Northrop, in the spring of 1910. The plan met with considerable favor, but the total amount needed, $250,000, could not be secured as first planned and the legislature was asked to contribute toward the project, the Minneapolis Commercial club pledging $75,000 if the legislature would contribute $150,000. This plan was not acceptable to the legislature, which adjourned without making the needed appropriation.

At the request of the University authorities, the Union ceased its active campaign for the building and, at the request of the regents, the legislature of 1913 voted to devote the chemistry building, which is to be vacated when the new chemistry building is completed, probably in the fall of 1914, to the use of the men for a Union building, and appropriated $17,500 to make certain fundamental changes in the building. To secure the sort of building needed will require $100,000 additional and it is proposed to raise this sum among friends of the University.

The proposition to make the building a testimonial to President Northrop was abandoned when it was announced by the regents that they proposed to name the new library building, which will be the most imposing building on the campus, Northrop Hall.

Since its organization the Union has been a positive force in University life. In the fall of 1909 a two-day carnival was held in the University Armory; the carnival was a great success and netted the Union a few hundred dollars. The next year, 1910, a play, written by Edgar Allen, "The Prof and the Princess," was put on by members of the Union at the Princess theatre. All parts in the cast being taken by men. This was a great success and aroused great interest throughout the city as well as on the campus. A year later, 1911, the Union put on, at the Shubert theatre, "The Girl in the Moon," all parts being taken by men. This play was likewise written by Mr. Allen and received with great enthusiasm by the public, being a success in every way. The Union had charge of the business management of the May Fete, which was a great financial as well as social success. The Union has also held two informal get-togethers at the University Armory which were unqualified successes. In the spring of 1913, the Union gave an All-University circus on Northrop Field. Three performances were given in two days. The affair was a financial as well as spectacular success. Real co-operation between the various departments of the University to make the affair a genuine success resulted in the promotion

of a sense of University fellowship that was really worth while.

The Union has from its first inception, stood for one thing above all others—the building up of a proper University spirit among the men of the University.

Minnetonka Fruit Farm, The. The Legislature of 1878, March 8, authorized the regents to purchase a fruit farm at Minnetonka at a cost of not to exceed $2,000. The farm, 116 acres, was purchased of Culver & Farrington. The money to pay for this land was taken out of current expense account, $800, and the balance, $1,200, from the fund received from the sale of the Congressional land grant of July 2, 1862. The provisions of the act required that this land be used to conduct experiments in apple and other fruit trees, under the direction of a person to be appointed by the governor and an annual appropriation, of $1,000 was made for carrying out the provisions of the act. Peter Gideon, of Excelsior, who had originated the Wealthy apple, was appointed by the governor in conformity with the provisions of the act. For ten years this farm was maintained, and many experiments of value, were conducted. The horticultural department of the experimental station was found to be able to carry on these experiments fully as successfully as on this farm and the legislature of 1889, authorized the regents to sell this farm, repealing the act authorizing its purchase and providing for carrying on experiments on the same. The sale of the farm was left to the discretion of the board of regents. Real estate values fell and the regents were unable to make a sale upon terms that seemed as satisfactory until 1896, when forty acres were sold for $8,000. The last sale was made in December, 1901, and the total amount realized from the sale was $16,469.43. Of this sum $1,309.10, were turned back into the permanent University fund, to reimburse that fund for money advanced on the purchase price of the farm, the balance going into the general University current expense fund. This was the first purchase of land, made for strictly experimental purposes, in connection with the University or any of its departments, other purchases having been made for illustrative purposes in connection with instruction.

Miser, Wilson L., instructor in mathematics 1913-.

Misz, Alice Margaret, instructor in botany 1907 to 1912, now Mrs. A. J. Hoag.

Mitchell, Claude, teaching assistant in physiology 1913-.

Mitchell, D. C., instructor in physical training and director of gymnasium 1910 to date.

Mitchell, Harry S., quiz master 1908-11.

Mitchell, Thomas Warner, born December 4, 1879, Benton Co., Arkansas; American ancestry; m. Elizabeth Rau; one daughter and one son; assistant professor of business administration since May, 1909; A. B. cum laude, University of Washington, '00, Ph. D., Pa., '05; twelve years experience in teaching in universities and some experience as public accountant; research work in finance and in accounting systems; has published many articles on financial and accounting subjects in the Quarterly Journal of Economics, Journal of Accountancy, trust companies magazine and other periodicals; member Saturday Lunch Club, treasurer Minnesota state board of accountancy, member public utilities franchise committee of fifteen of the Saturday Lunch Club, member American Economic association, Office Men's association.

Mitre Club was established November 1st, 1906. Its purpose is to premote a proper interfraternity feeling by associating representative men from the different groups. Its membership includes ten fraternity men elected every other year from the sophomore class.

Moak, Clarence Britt, born June 25, 1884, Minneapolis. East high school and School of agriculture. Assistant in dairy laboratory, Dairy school, 1898-01; instructor in charge of dairy laboratory, 1903-05; 07 and 08-.

Model School. The University maintains a model school in connection with the college of education. This school was established in November 1907 and work was offered covering the 7th and 8th grades. At that time Professors Rankin and Holt were in charge of the school. A year later Dr. Alice Mott took charge of the school and has been in charge of it since. At the present time the school enrolls pupils from the 7th to the 12th grades inclusive. The primary purpose of the school is to afford prospective high school teachers an opportunity to see the work of secondary schools conducted, under normal conditions, in as efficient manner as possible, and in order to give them some actual practice and familiarity with methods of instruction and management of schools of such grade. It is planned, as soon as possible, to have a fully graded elementary school with kindergarten, an ungraded room and a three-grade group. Up to the present time the work has been conducted in an old frame dwelling house on Beacon street. It is hoped that in the near future it will be possible to make provision for this work in a building specially constructed for the purpose.

Monro, Isabel, cataloger, 1911 to 1913.

Monson, George S. Student assistant in dental technics, 1892-93; D. M. D.—Instructor in prosthetic technics, and orthodontia, 1893-96.

Montgomery, Joseph S., assistant professor of animal husbandry 1912 to date.

Montgomery, Louise. Instructor in rhetoric, 1890-92. Graduate of the University class of 1889.

Moore, A. L. Dental infirmary clerk, 1903 to date.

Moore, Ira. Instructor in mathematics in the preparatory department of the University, 1867-69.

Moore, James Edward, born March 2, 1852, Clarksville, Pa.; American ancestry; m. Louise C. Irving; one daughter; professor of orthopedic surgery, 1888-90; professor orthopedic surgery and clinical surgery, 1890-04; professor of surgery and head of department, 1904 to date; in 1908 was made chief of the department and in 1909 chief of surgical clinics in the University hospitals. Two years in medical department of University of Michigan; M. D. Bellevue '73; three years graduate work in New York and other American clinics; 1885-86 in Berlin; country practice in Emlenton, Pa. until 1882; since that time in Minneapolis, devoted exclusively to surgery since 1888; research work has been along the line of his practice, surgical technic; author of Moore's orthopedic surgery, contributor to the American Practice of surgery and has made something over 150 contributions to medical journals; member, Judicial council of American medical association, Civic and commerce association, all local and state societies, fellow Am. Surgical association, Hon. fellow American orthopedic association; Universalist.

Moore, John G., born at Schney, Germany, November 12, 1848. Early education in schools of Schney; came to United States when quite young and entered Mexico, N. Y., Academy; Cornell university, 1873; instructor in German, 1873-74; professor of North European languages, 1874-79; professor of modern languages, 1879-1880; professor of German language and literature, 1880 to date. Soldier in the 184th New York volunteers, during the war of the rebellion, serving until the close of the war. Member of the Minneapolis board of education, 1869-90; Public library board, 1890-96; president of the Board of corrections and charities, 1899-1903.

Moore, William, born January 29, 1887, at Phoenixville, Pa.; m. Mary E. Behney; two sons, assistant professor entomology, University Farm, 1913; B. A., Ursinus college, Collegeville, Pa., '07; honors in biology; graduate work at Cornell for two and a half years; assistant instructor in biology, Ursinus, '07; assistant instructor in botany, Cornell, 1909-10; lecturer in entomology and zoology. School of agriculture, Potchefstroom, South Africa, 1910-13; publications, South Africian insects and other external pests of man and domesticated animals, and various articles on South African insect pests; member, A. A. A. S., Entomological society of America.

Moorhead, Martha B., born December 5, 1865, Milan, Ill. Educated at Blairsville college (formerly Ladies' seminary); Medical college of Pennsylvania; New England hospital; Northwestern hospital. Teacher, Blairsville ladies' seminary. Lecturer in domestic hygiene, School of agriculture, since January, 1903.

Moren, Edward, clinical assistant in medicine 1910 to 1913; assistant in surgery 1913-.

Morgan, Edmund S., professor of law since 1912.

Morgan, George H., born at St. Catherines, Ont., January 1, 1855, arrived in Territory of Minn., 1856, lived at St. Paul one year, then with parents moved to St. Anthony. Early schooling, public school of St. Anthony and Minneapolis and University. Appointed to West Point 1876 from the old 3rd district. Graduated from Military academy, 1880. Appointed 2nd lieutenant 3rd U. S. Cavalry. Served with the regiment until June, 1903, passing through the grades of 1st lieutenant and captain; is now Major 9th U. S. Cavalry. Served with the 3rd Cavalry in Wyoming, Arizona and Texas. Breveted 1st lieutenant and medal of honor in campaign against Apaches in Arizona, 1882. In 1891 detailed to the University for four years. Rejoined 3rd Cavalry in 1895. Campaign of Santiago, 1898. Appointed Major 28th Vol. Infantry, 1899 and served with that regiment in the Philippines until mustered out May 1, 1901. Detailed at the University of Minn. August 1, 1903, recalled by government in 1905.

Morrill Bill. This bill became a law August 30, 1890. The bill is "An act to apply a portion of the proceeds of the public lands to the more complete endowment and support of the colleges for the benefit of agriculture and mechanic arts, established under the provisions of an act of Congress approved July 2, 1862." It is directed to the better support of agricultural education, rather than investigation, save as investigation is a part of education. Under its provisions the University receives annually $25,000. Originally the bill provided for an annual appropriation of $15,000, with an increase of $1,000 each year until the sum reached the $25,000 which the bill now carries.

Morrison, Angus W., assistant in mental and nervous diseases 1913-.

Morse, John Hinckley, born Bath, Maine, September 18, 1875; English ancestry; m. Elizabeth Wolston; two sons; clinical assistant in ophthalmology and otology to 1910; clinical instructor to date; A. B., '97. Bowdoin college; M. D., Harvard, '01; oculist and aurist; member, A. M. A., Hennepin County medical association, Minn. State medical association, Minn. Acad. of opthalmology and otolaryngology.

Mortenson, M. P., assistant in dairy school 1906-10.

Morton, Agnes, instructor in domestic sciense 1912 to date.

Moses Marston Scholarship in English, The. Friends and pupils of the late Professor Marston, Ph. D., have given and pledged one thousand dollars as a memorial fund. The annual income of the fund is used to help some student in the long English course. The award is made on the basis of pecuniary need and of deserving scholarship.

The benefits of the scholarship have been enjoyed by the following named students; Clarence Ellithorpe, 1895-96, Sivert Jordahl, 1896-97; Isabel D. Parker, 1897-98; Ethel C. Brill, 1898-99 Edward O. Ringstad, 1899-00; Arthur Upson 1901-02; Allen R. Benham, 1902-03; Amanda Lucas, 1906-07; 1910-11, Eleanor Sheldon; 1911-12, Ruth Erickson; 1912-13, Lester Dickinson. The fund has increased through interest payments until now it is $1,500.

Mott, Alice Jane Ripley, principal of the University practice school 1908 to date.

Moving Pictures. The University owns a moving picture camera and is making, as occasion offers, films showing University scenes, student life and activities.

Mowry, Jason L., born November 3, 1877, Rockford, Iowa; son of Wheelock M. and Harriet Hager Mowry; m. Mary A. Ellsworth; instructor farm machinery, 1908-09; in mechanics 1909-12; assistant professor agricultural engineering 1912 to date; attended Iowa state teachers' college 1897-98; Minnesota 1905-07; military instructor, Iowa, 1898-99; two years experience as millwright and salesman of mill supplies; member, American peace society, Treasurer of Am. Soc. of Agr. Engrs.

Mullin, Robert Hyndman, born January 24, 1877, Hamilton, Ont., Canada. Graduate of Collegiate institute, Hamilton; B. A., University of Toronta, 1899; M. B., same, 1902; licenciate of the College of physicians and surgeons of Ontario, 1902. Assistant demonstrator of pathology, University of Toronto, one year. Demonstrator of pathology and bacteriology, University, 1904-06; senior demonstrator of pathology and bacteriology, 1906 to 1908; assistant professor to 1913; professor of public health and bacteriology 1913-. Clinical assistant of Rockwood's hospital for the insane, Kingston, Ont., and interne, Toronto general hospital, one year; assistant bacteriologist of the Provincial board of health, laboratories, Ont. Member of Alpha Delta Phi; Nu Sigma Xi; Hennepin county medical society; Minneapolis medical club.

Mu Phi Delta. A musical fraternity for men and women founded April 14th, 1908.

Murta, Hugh M. Laboratory assistant in chemistry, 1913.

Murray, William Robbins, born April 6, 1869; Marquette, Mich.; Scotch English ancestry; m. Elizabeth Eaton; two sons and one daughter; instructor in ophthalmology and otology, 1901-04; clinical professor of rhinology and laryngology 1904-09; professor rhinology and laryngology 1909 to 1913; associate professor of diseases of eye, ear, nose and throat 1913-. Ph. B., Michigan, '92; M. D., Rush, '97; contributor to special and general medical journals; member American and Minnesota state medical associations, Am. academy of medicine, fellow Am. academy ophthalmology and oto-laryngology; Episcopalian.

"The Museum." A collection of curious communications received at the executive offices of the University during the past twenty-five years. Kept in the offices of the registrar.

Museum. In addition to the general University museum, which includes the museum of geology and animal biology which are located in Pillsbury Hall, special museums are maintained by various departments to supplement the work of instruction in those departments. Chief among these departmental museums are the following—agriculture, botany, chemistry, civil engineering, classical, electrical engineering, engineering mathematics, English, mathematics, mechanical engineering, geology and mineralogy, the Williams collection of photographs and photographic negatives and zoology. The University museums are maintained primarily for the purpose of supplementing the work of instruction in the various departments and not for show. The collections are being added to from time to time as opportunity affords. For further information see under heads indicated above.

Musical Federation. Organized in May 1907 and included the Euterpean, Glee and Mandolin clubs and the orchestra and band.

Nachtrieb, Henry Francis, born May 11, 1857, near Galion, Ohio. Public schools and German Wallace college and Baldwin university; B. S., University, 1882; graduate student at Johns Hopkins, Assistant in botany and zoology, 1885-86; assistant in zoology, 1886-87; professor of animal biology, 1887 to date; zoologist of the geological and natural history survey and Curator of the zoological museum since 1887. Author of Preliminary notes on the Development of Echinoderms of Beaufort; Notes on Echinoderms obtained at Beaufort, N. C.; A. New Waterbath; Permanent Preparations in Hermetically Sealed Tubes; Freshwater Zoological Stations; The Megalops; reviews of text books, etc.;

editor of the zoological series of the Minnesota geological and natural history survey. Fellow of the American association for the advancement of science; member of the American society of zoologists, Central branch; American breeders' association; American association of museums; Washington academy of sciences; St. Anthony commercial club. President of the General Alumni Association since its organization.

Neal, Grace, assistant in drawing 1911-12.

Neill, C. H. Lecturer (homeopathic) on skin and genito-urinary diseases. 1903-04;

Neill, Edward D., regent ex-officio February 28, 1860 to July 1861, the date of his resignation as superintendent of public instruction; chancellor of the University from the fall of 1858 to July 1861; originally appointed by the board to the position of professor, same, 1904 to 1909. chancellor and became chancellor ex-officio February 28, 1860. holding the position until date of resignation. See Neill's history of Minnesota.

Nelson Bill. The Nelson bill is practically an amendment to the Morrill bill, which was for the encouragement of agricultural education, as distinct from agricultural investigation. It was approved March 4, 1907, and appropriated $5,000 for 1907, and $5,000 more for each of the following four years, until it reaches a maximum of $25,000, doubling the appropriation carried by the Morrill bill. The money provided by this bill is to be used strictly for agricultural education and no part of it can go for general expenses, to include the mechanical arts.

Nelson, Benjamin F. Appointed regent in 1905 re-appointed 1910; term expires 1916. Born May 4, 1843, Greenup county, Ky. Educated in the public schools. Enlisted and served as a Confederate soldier in 2nd Kentucky Cavalry; prisoner at Camp Douglas, Chicago, at close of war. Came to Minnesota in September, 1865; associated in lumber business until 1873, when he took up the business on his own account; member of the Nelson-Tuthill lumber Co.; president of the Leach Lake Lumber Co.; B. F. Nelson & sons Co.; Leach Lake land Co.; vice-president of the Spokane lumber Co.; director in Swedish American National Bank; First National Bank of Walker; trustee Swedish Savings Bank; trustee and vice-president of Hamline University; ex-alderman; member of park board, board of education, board of managers of State prison. Member of the State historical association.

Nelson, J. H., born at Da Chang, China; B. A.; research work in animal biology and also for dentistry department; assisted in physical culture department of the Morris agricultural school.

Nelson, Knute, Alexandria. Appointed regent, 1882, re-appointed 1884, 1887, 1890 for six years, became governor of the state and so regent ex-officio, January 16, 1893, holding this office until January, 1895. Elected United States senator in 1895, re-elected in 1901, 1907 and 1913.

Nelson Law Library. This is a rare collection of fifteen hundred volumes, donated to the University by the Honorable R. R. Nelson, of St. Paul, upon retirement from the federal bench. It contains many old English reports, in addition to those already mentioned, and many ancient treatises upon common law.

Nelson, Louis Allan, clinical instructor in ophthalmology and otology 1912 to date.

Nelson, Mark O. Demonstrator of prosthetic dentistry, 1895-96.

Nelson, O. B., instructor in drawing and instrument man since 1911.

Nelson, Socrates, Stillwater. Regent, 1851-59.

Ness, J. A. Instructor in Scandinavian and Latin, 1891-93.

Newcomb, Edwin L., instructor in pharmaceutical botany and pharmacognosy 1912-13; assistant professor same 1913-.

Newhall, Richard, scholar in history 1909-10.

Newhall, William B., instructor in civil engineering 1908-09.

Newkirk, Burt Leroy, born May 1, 1876, Ellensville, N. Y.; American ancestry; m. Louise Leavenworth; one son and one daughter; assistant professor of mathematics and mechanics since 1907; A. B. '97; A. M. '99; Ph. D., Munich, '02; taught in Univ. of Calif. 1903-06; Lick observatory 1906-07; research work in the Stellar parallax, photographic measuring (theory), Gyroscope and its practical applications; author of, Parallax of ring nebula in lyra, Stationary meteor radiants, Tables for reduction of photographic measures, Nutation in practical applications of gyroaction; member, board of directors University Y. M. C. A., American mathematical society, Astronomische Gesellschaft, A. A. A. S.; Methodist.

Newkirk, Harris D. Assistant in (homeopathic) clinical medicine and physical diagnosis, 1903-04.

Newton, Edmund, metallurgist school of mines, experiment station since 1912.

Newton, Harold M. Student assistant in chemistry, 1904-07; instructor in chemistry, 1906-07.

Nichols, Charles Washburn, born June 20, 1883, Belchertown, Mass.; son of Wilbur Fiske and Martha Washburn Nichols; m. Ruby Hope Fletcher; instructor in rhetoric, 1907-11; assistant professor, 1911. to date; B. A. Yale, '05, with honors in English; a year in Harvard and one year in Yale grad-

uate school; M. A. Yale, '07; research work in the field of American literature for a Yale Ph. D.; author of "Roland and Aude," a verse play, the Yale university prize poem for 1907; "Songs in Many Moods," '12; member, Modern Language Association of America; Congregationalist.

Nichols, John, St. Paul. Appointed regent March 4, 1868, serving on the special board of three until February 18, 1868. Appointed under the re-organization March 2, 1868, and served until day of his death, July 29, 1873, having been re-appointed in 1871.

Nicholson, Edward Everett, born February 9, 1873, at Yellow Springs, Ohio; English-Scotch ancestry; m. Pearl Camp; one son; instructor in Chemistry 1895-98; assistant professor of same since that date; chairman of students work committee since 1907; chairman Administration Board of the college of science, literature and the arts, 1913; B. S., Nebraska, 1804; M. A., same, '96; fellowship, Nebraska, 1894-95; was assistant chemist of the U. S. department of agriculture 1893-94, located for a part of each year at Medicine Lodge and Sterling, Kansas, engaged in sorghum investigation; 1894-95, acting charge of sugar beet investigations, coveing state of Nebraska; research work in sugar beet investigation, corrosion of underground iron and lead, and sub-oxide of lead; joint author of two bulletins of the Nebraska state experiment station on sugar beet investigations; member, American Chemical Society; Presbyterian.

Nickerson, B. S. Instructor in chemistry, 1902-03.

Nickerson, Margaret L. Assistant in histology, 1897-98; instructor in histology, 1898 to 1907.

Nickerson, Winfield S. Instructor in histology, 1897-98; demonstrator in histology, 1898-99; assistant professor of histology and embryology 1899 to 1912.

Ninety (Class of) Fellowship. The class of 1890 at graduation undertook to establish a fellowship as a class memorial. It was hoped to make the fellowship an annual affair and plans were made and an agreement entered into with the University fellowship association to bring this about. The plans did not work out as had been expected and the arrangements were finally given up. The class requested the Fellowship association to return to it the money already advanced. This request was granted and the class committee took charge. In 1902 this committee found it was in possession of sufficient funds to award the fellowship and Charles E. Stangeland of the class of 1901 was appointed. Mr. Stangeland spent a year in Germany, making his chief line of work economics, studying with Schmaller, Wagner and Sering; his secondary line was politics, studying under Gierke and von Martels, and anthropology, studying with von Luschan. The subject of his thesis was "Pre-Malthusian Doctrines of Population." This thesis fills an octavo volume of 358 pages which was pubished by Columbia University Press. Dr. Stangeland has given in this thesis an exhaustive review of ancient, mediaeval, and modern theories of population down to the 19th Century. The fund has now reached $1,500, and the class has definitely arranged to make this up to $2,000 on or before its 25th aniversary reunion when the fund will be turned over to the University, its income to be awarded probably every other year. A committee consisting of Messrs. Walter E. Winslow, E. P. Allen and H. G. Richardson are in charge of the fund.

Nippert, Henry Theo., born February 12, 1868, Heilbronn, Germany; m. Bertha E. Wendt; one son and three daughters; clinical instructor in medicine since 1909; Ph. G., Cincinnati pharmaceutical college; M. D. Miami medical college; interne Cincinnati city hospital, 1892-93; member Ramsey Co., Minnesota State and American medical associations; Presbyterian.

Nippert, Louis Albert, born in Bale, Switzerland; his father, the Rev. Louis Nippert, was formerly president of the Methodist Theological seminary at Frankfort-on-the-Main, Germany, and was directly descended from French Huguenots; m. Mary Rauen; one daughter and one son; clinical instructor in medicine, 1898-03; clinical professor of medicine, 1903 to 1913; M. D., Miami Medical college of Cincinnati, Ohio, '83; attended clinics in Paris and Vienna; engaged in general practice in Minneapolis since 1886; member, Hennepin county medical society, of which he has been president, Minnesota state medical society and Minnesota Academy of Medicine.

Nitobe, Inazo. Japanese exchange lecturer who gave a course of lectures at Minnesota in the spring of 1912. Graduate of Sapporo Agricultural college, later studied at Johns Hopkins and in Germany. Has held several high educational posts in Japan including a chair in Kyoto Imperial University. At the time he was at Minnesota he was president of the Tokyo Higher College. For a number of years he was adviser of the Formosan Government on educational and agricultural matters. He is the author of Bushido (The Knightly Way). See Minnesota Alumni Weekly of November 13, 1911.

Hamilton Wright Mabie, of the Outlook was sent to Japan as exchange lecturer.

Nixon, Lillian. Instructor in rhetoric, 1904-06. Died, September 19th, 1913.

Nootnagel, Charles. Assistant in clinical medicine, 1894-99, clinical professor,

same, 1899-06; clinical professor of medicine and physical diagnosis, 1906 to 1909.

Norman, Dr. M. L., instructor in operative dentistry 1913.

Norris, Elizabeth May. Instructor in freehand drawing, 1901-03.

Norris, J. Anna, born in Boston; director of health and physical training for women at the University since 1912; graduate of the Boston normal school of gymnastics which is now Wellesley College; M. D., Women's medical school of Northwestern University; experience as supervisor of physical training in the public schools of Springfield, Mass.; also as instructor in the department of hygiene and physical education and one of the school physicians in the school of education of the University of Chicago 1907-12; was a member of the committee which arranged the first conference of physical educators of the middle west; is recording secretary of the Chicago Geographic society and a member of the Playground association of Chicago, Chicago Pediatric society, Am. Physical education association, National education association, Public schools physical training society, and the Prairie and Women's city clubs of Chicago.

North Central (Grand Rapids) Experiment Station. The station was established in 1896 and consists of 454.6 acres. The station has been engaged in working out a system of practical farming for the timber section of northern Minnesota and is trying to induce farmers in that section of the state to follow this system. A great many facts of value have been deduced as a result of the work at this station, which have been invaluable to the part of the state where it is located.

North Central Experiment Station Buildings. The buildings consist of a superintendent's residence, including experiment station office, a farm house, two dairy barns with silos and other minor farm buildings, a dairy laboratory building with hall and library on the second floor, and a special poultry department consisting of poultryman's residence and poultry house. The total valuation of the buildings is $21,425.00.

Northeast Demonstration and Experiment Farm. This farm was purchased from the proceeds of an appropriation of $65,000 made by the legislature of 1911. It includes 240 acres, located about seven miles north of the Union Depot at Duluth. The total cost was $13,500. The purchase was finally made late in the summer of 1912 and actual operations on the farm were begun in the spring of 1913. 60 acres have been cleared and it is proposed to clear additional land and to erect a horse barn, dairy barn, superintendent's house, farm house, machine shed and possibly a creamery and several small cottages. The farm is divided into dairy, trucking, poultry, fruit, and home croft units. Three lines of work are being carried on—demonstration and experiment work in relation to the farm needs of this section of the state. The farm also provides for a continuation school to give graduates of the school of agriculture practical farm experience. The legislature of 1913 appropriated $17,200 for further development and maintenance of this station. M. J. Thompson, Ag. '11, is superintendent.

Northern Oratorical League, The. It is composed of theoratorical association of the University of Michigan, Northwestern university, the University of Wisconsin, Oberlin college, the State University of Iowa, the University of Chicago, and the University of Minnesota. Its purpose is to foster an interest in public speaking and to elevate the standard of oratory by holding annual contests. The contests are open only to undergraduates. Minnesota was admitted to this league in 1899. Joseph W. Beach now assistant professor of English, was Minnesota's first representative in this league, he won fifth place in the contest. In 1900, W. M. Jerome, represented Minnesota, and was awarded fourth place. In subsequent years. Minnesota has been represented successively by T. D. Schall, who stood fifth in 1901; by T. D. Schall, who won first place in the league contest in 1902; in 1903, G. P. Jones, went as Minnesota's representative and won third place; the next year Mr. Jones again represented Minnesota and won first place; in 1905, Theodore Christianson, represented Minnesota and was awarded second place; in 1906, Lucile Way represented Minnesota and won fifth place; in 1907, Vivian Colgrove was Minnesota's representative and was given fifth place in the League contest; 1908, Clarence B. Harter, was given 6th place; 1909, Sigurd H. Peterson won 2nd place; 1910, Edwin W. McKeen; 1911, Marc Fraser, 4th place; 1912, Henry J. Burgstahler, 2nd place; 1913 Lillian Byrnes, fifth.

Northern Pacific Tracks. In 1887 the Northern Pacific Railway company built its line along the south side of the Campus and condemned and purchased certain lots belonging to the University, paying for the same $15,000.00. These proceed-

ings were bitterly contested by the regents, and the case was carried to the supreme court, which handed down a decision, in favor of the railroad, holding that the location of the tracks "eight hundred feet from the University building" could not be considered objectionable.

While the tracks have always been a source of disturbance and a serious damage to the University, the purchase of additional land for the campus, to the south of these tracks, brought up the question again, in an acute form.

The legislature of 1909 passed an act requiring the Northern Pacific Railway company to cover its tracks through the University campus.

Up to early in 1913 nothing had been done to enforce this law. The attorney general, whose duty it was to bring action, in the name of the state, to enforce the law, asked to have a committee of alumni appointed, to act in his name, and bring action against the company. A committee consisting of C. J. Rockwood, Hugh V. Mercer, Price Wickersham, Hiram D. Frankel and Paul J. Thompson, was appointed by the General Alumni Association. This committee will bring action to enforce the law but it is hoped that the Northern Pacific Railway company may be ready to accept some compromise that will allow of the complete elimination of the tracks.

North, John W., St. Anthony. Treasurer, but not a member, of the board of regents during its organization from 1851-60. To Colonel North, more than to any other one man, belongs the credit of starting the movement which resulted in the establishment of the University of Minnesota. He, it was, who framed the act which was adopted by the University February 13, 1851, as the charter of the University.

Northrop, Book of Addresses. During the summer of 1910 President Northrop issued, through the H. W. Wilson Co., a volume of addresses. "These addresses," explains President Northrop in the preface, "are published, not because I suppose they are a contribution to human knowledge, but simply because friends have asked me to publish them. Most of the addresses delivered by me when I was connected with Yale college were unwritten and cannot therefore be reproduced. Only two of the addresses belong to that period."

Northrop, Cyrus, born September 30, 1834, at Ridgefield, Conn. Yale, 1857; Yale law school, '59; LL. D., Yale, '86; same, University of Wisconsin, 1904; same, Illinois college, '04; same, South Carolina college, '05. Admitted to bar of Connecticut, 1860; clerk of the Connecticut House of Representatives, 1861; senate, 1862; editor of the New Haven Palladium, 1863;

professor of rhetoric and English literature, Yale, 1863-84; President of the University, 1884-1911. President emeritus since that date. Ex-officio a member of the board of regents same time. For biographical sketches, see Forty years of the University of Minnesota, also Gopher of 1899, pp. 19-32; for a study of his personality see Gopher of 1901, pp.234-241. President Northrop has been in almost constant demand for public addresses since coming to the University. He has lectured to the students upon Shakespearean topics, mainly. At national meetings of various church bodies, particularly the Congregational, he has had a leading part and his addresses upon such occasions have usually struck the key note of the occasion. His short talks to students after chapel have made their impress on the lives of the vast throngs of students who have been privileged to hear them. He has published nothing but pamphlets of his various addresses and one collected volume of the same. Phi Beta Kappa; Delta Kappa Epsilon; eight societies devoted to good government and religious progress; also many other local and national organizations.

See article by Dr. Folwell, reprinted from the Yale Alumni Weekly, in the Minnesota Alumni Weekly of April 24, 1911.

Northrop Field. An enclosed athletic field containing about six acres, immediately adjoining the armory. It is surrounded by a high brick wall, the gift of A. F. Pillsbury, Law '94, and is one of the finest athletic fields in the country. The whole enclosure is covered with turf; and excellent running tracks, a base ball diamond and tennis and football grounds are laid out. The grandstand and bleechers will provide seats for from fifteen to twenty thousand.

The acquiring of this magnificent field is due largely to Governor Pillsbury, who purchased six lots between Union and Harvard streets and between Arlington street and University avenue. He enlisted the aid of some prominent alumni in the city, and secured the vacation of Union street from Arlington to University avenue and of Arlington street from Harvard to the river. The state purchased four lots, thus giving the University the whole block and the vacated streets, to be added to the original field, which extended to Union street only. The gift was planned by Governor Pillsbury and was consummated by his heirs, after his death, December 22, 1902 and December 21, 1903.

Northropiana. Ina Firkins, '88, reference librarian, has collected material relating to President Northrop including his published addresses and newspaper reports of the same. The collection fills seven volumes of newspaper clippings, magazine articles and reports of addresses delivered by President Northrop, covering his life while con-

nected with the University of Minnesota and to some extent the period of his professorhip at Yale University. The collection covered a period of more than ten years and is being added to from time to time as occasion requires. The whole constitutes an exceedingly valuable collection.

Northrop Testimonial. On June 8, 1910, the alumni presented to President Northrop an engrossed address reciting their appreciation of his services to the University and expressing their love and devotion to him. A specially bound volume of Forty Years of the University of Minnesota, containing a copy of this address specially engrossed on parchment, was presented to President Northrop. For a full statement concerning the presentation see the Minnesota Alumni Weekly of June 20, 1910. Also Forty Years of the University of Minnesota.

Northrop, George Norton, born August 25, 1880, Wisconsin; American ancestry; m. Catharine Forman Clerihew; instructor in English since 1909; one year at the University of Wisconsin; B. A., Minn., '01; M. A. '07; two years at Magdalen college, Oxford; three years instructor in English University of Wisconsin, research work; 17th century, preparation of edition of works and life of William Cartwright, also of edition of Lord Clarendon's essays; publications, "Poems," with Arthur Upson, '01; "In Itinere" in England in 1909; various contributions to magazines and journals in England and America; lecturer on educational and literary subjects; member, Authors' club, London; American historical association, Modern language association, American archaeological society; Episcopalian.

North Star. A society of young men and women of the school of agriculture organized for literary training.

Northwest (Crookston) School of Agriculture and Experiment Station. This station and school is located one and one-half miles north of Crookston on land donated to the State in 1894 by James J. Hill, of the Great Northern railway company. The station was established by legislative act in 1895, when $8,000 were appropriated by the legislature to make a beginning of investigations and experiments to determine the best methods of handling soil typical of a large region in that part of the State. The land is a dark clay loam, very hard to work. It is low and drainage was absolutely necesary before the land could be used. There are on the farm, two miles of open ditches and nine miles of tile drainage and the farm has been put in shape to grow fair crops. Following these experiments the station was to determine the proper rotation of crops and devise plans to combat the weeds and insects found in that part of the State. In addition, work in dairying, live stock raising, poultry, tree and orchard growing on prairie lands were objects for special investigation. Torger Hoverstad was in charge of the station from its beginning to 1904 and is largely responsible for the success of the early work of the station. William Robertson followed him and was in charge until 1910, when he died. It was under the direction of Mr. Robertson that the school was established.

The Northwest school of agriculture was established by the legislature of 1905 and $15,000 was appropriated for a building and equipment, but no provision for the maintenance of the school was made. The citizens of Crookston raised $2,500 and offered it to the regents so that school might be started in the year 1907-08. This offer was accepted and the school was opened with an attendance of over thirty. The legislature of 1907 made further provision for this school by appropriating $4,000 annually for its maintenance and $50,000 for dormitory and equipment, and $15,000 for industrial building. The state also reimbursed the citizens of Crookston who advanced the $2,500 used originally to start the school.

At the present time this station has the following farm buildings, constructed in the year specified and at the cost designated: Farm house, 1895, $3,000; Poultry house, 1897, $1,000; Horse barn, 1901, $6,500; Superintendent's residence, 1905, $3,000; Machinery shed, 1905, $500; Dairy barn, 1905, $2,500; Root cellar, 1909; $1,000; Slaughter house 1909, $1,000; Swine barn, 1909, $1.500; four cottages for station men, 1911, $10,000; Sheep fold, 1911, $1,500; additions to farm house, 1911, $1,500; to Superintendent's residence, 1911, $900; to barns, 1911, $4,000; to Poultry houses, 1911, $2,000; silos, 1911, $500.

Six brick school buildings have been provided up to the present time, as follows: School building (now Home Economics), 1905, $15,000; Stephens Hall (Boy's dormitory and dining hall combined), 1907, $50,000; Mechanical building, 1907, $15,000; Administration building (includes an auditorium and gymnasium), 1909, $40,000; Girls' dormitory, 1909, $25,000; Science Building, 1912, $40,000; addition to Mechanical Building, 1911, $10,000; various items, as spur track, alterations and repairs, sidewalk and curbing, grading and grounds, well and pump, water works system, and trees and shrubbery, 1911, $12,990.

Since 1910, Mr. C. G. Selvig has been in charge of the department and under his leadership the station and school have been making steady progress.

For full information see President's report of 1911-12, page 99.

Northwestern Branch of the American Pharmaceutical Association meets six times a year at the college of pharmacy or elsewhere in the Twin Cities. Pharmacy students are always welcome at these meetings and are eligible to membership in the branch.

Northwestern Gymnastic Society was organized in 1910. Minnesota has won all

the meets except that of 1913, which was lost by one twenty-fifth of a point.

North Woods. See The Minnesota Forester.

Notestein, Wallace, born December 16, 1879, Wooster, Ohio; German Scotch ancestry; instructor in history 1908-10; assistant professor of history since 1910; B. A. Wooster, '00; M. A. Yale '03; Ph. D., Yale '08; assistant professor of history at Kansas 1905-08; research work in history of English witchcraft, 1911, various articles; special field of work, England 1642-1660; member, American historical association, Phi Gamma Delta, Graduate club, Authors' club of London.

Noyes, Daniel R., St. Paul. Appointed regent December 12, 1904. Died spring of 1908. Wholesale druggist, member of the firm of Noyes Brothers & Cutler. Born November 10, 1836, Lyme, Conn. Volunteer in Civil War; founded present business house in 1869; connected with numerous commercial and public institutions; trustee of Carleton college for thirty-two years; was vice-moderator of the Presbyterian general assembly, 1902; member of the committee for the revision of the creed; vice-president of the American Sunday School Union; member of the Society of colonial wars; Sons of the American revolution; American social science association; American historical association; National geographical society.

Noyes, William A. Instructor in chemistry, 1882-83.

Nu Sigma Nu. Medical fraternity. Epsilon chapter established in 1891. Founded at Michigan in 1869.

Nurses, School for. This school was organized in 1909 and is under the management of the faculty of the college of medicine and surgery and is affiliated with the University hospitals. The school is conducted not merely to secure suitable hospital nursing service, but to furnish a thorough and scientific training in nursing. Graduation from a high school is a pre-requisite. The course of study covers three years. A preliminary course of six months work is required and no one will be advanced who does not pass the examinations required at the end of four months. The next two months are spent in the hospital in practical work and training in the economics of the service. If, in this work, the student demonstrates aptitude for the work, she is advanced to full hospital service. During the remainder of the course the students pursue a graded system of instruction and practical work that gives them an all-around training not otherwise to be obtained. Graduates of the school receive the degree of graduate in nursing. Graduate work, covering one or two years, leads to an appropriate certificate. Fee for the preliminary course is $25.00.

Nuzum, Helen B. Assistant in clinical obstetrics, 1897-98.

N. W. Harris Prize in Economics and Political Science. This annual prize of $250 has been offered by N. W. Harris of Chicago for competition among the students of the universities of Michigan, Wisconsin, Illinois, Iowa, Indiana and Minnesota. The first competition took place in the year 1911; the second which took place in 1912 was won by Percival W. Viesselman, a senior student at the University, with a thesis upon "Corrupt Practices Legislation." In 1913 William Anderson, likewise a member of the senior class, won first place in this competition with a thesis upon "State control of public utilities, with special reference to the state of New York." Minnesota has won two out of three competitions. The work on both of these thesis was done in the political science seminar.

Nye, Lillian Lydia, instructor in chemistry 1912 to date.

Oberhoffer, Emil. Professor of music, 1902 to 1907.

O'Brien, Christopher Dillon, born December 4th, 1849, at County Galway, Ireland; son of Dillon and Elizabeth O'Brien; m. Susan E. Slater; three daughters and five sons; lecturer on criminal law and procedure, 1888 to date; admitted to the bar January 1870 and has been engaged in general practice since that date; has been county attorney of Ramsey county and mayor of St. Paul; member, Minnesota Club, Knights of Columbus, Ancient Order of Hibernians, Junior Pioneers and Winnebousou club; Roman Catholic.

O'Brien, Henry J. Clinical professor of surgery, 1902 to 1913.

O'Brien, Thomas D., born February 14, 1859, at La-Pointe, Wis.; son of Dillon and Elizabeth O'Brien; m. Mary C. Cruice; two daughters and two sons; special lecturer upon the proper exercise by the state of its police power, college of law, 1907 to date; admitted to the bar April 17th, 1880; has been captain of Battery A., of the State militia, and state insurance commissioner and associate justice of the supreme court; Catholic.

Oestlund, Oscar W., born September 27, 1857, Attica, Ind. Augustana college, Rock Island, Ill.; University of Minnesota; A. B. Augustana, 1879; M. A., same, 1887; Ph. D., same, 1900. Entomologist of the geological and natural history survey of Minnesota; Entomologist of the Horticulturist society of Minnesota. Entomolo-

gist and assistant, 1884-85; entomologist of the natural history survey, 1885 to date; assistant and instructor, animal biology, 1891-1906; assistant professor, same, 1906 to date. Author of List of Aphididae of Minnesota; Synopsis of Aphididae of Minnesota; Laboratory Guide in Entomology; Papers before the Minnesota Academy of science and in Entomological News.

Ofstie, Edwin, assistant in mechanical engineering 1909-10.

Ogden, Benjamin Harvey, born February 11, 1860. Three Rivers, Mich. A. B., Carleton, 1881; M. D., Hahnemann, Philadelphia, 1885; A. M., Carleton, 1886. Principal of high school, 1881-82. Professor of obstetrics, college of homeopathic medicine and surgery, 1888 to 1909. Author of various articles written for medical societies and journals. On the surgical and gynecological staff of St. Joseph's, St. Luke's and City and County hospitals of St. Paul.

Ohage, Justus. Professor of clinical surgery, 1897 to 1909.

Okakura, Kakauza. Japanese exchange lecturer for 1913-14. Mr. Okakura is curator of the Japanese-Chinese Museum of fine arts of Boston and is a resident of Japan.

Old Days at Minnesota. By Professors John S. Clark and John C. Hutchinson, Gopher of 1908, pp. 32-35.

Oldest Graduate. The first class to graduate was that of 1873, which consisted of two members, Warren Clark Eustis, a physician who died May 28th, 1913, and Henry Martyn Williamson, secretary of the State Board of Horticulture, of Portland, Ore.

Old Main, The. R. S. Alden, architect. Contract let for west wing, August 9, 1856, to Alden, Cutler & Hall, for $49,600. No money in sight for paying for this building, but public opinion demanded it and with property advancing as it was at that time the regents figured that they could pay for the building by mortgaging the campus for $25,000; notes from sale of stumpage, $20,000; sale of old buildings, $2,500; bonds authorized by the legislature, $10,000, making a total of $57,500, to meet a certain indebtedness of $64,600—Contract price for building and bonds secured on campus, $15,000. Making the liabilities $7,100 in excess of assets. The terrible panic of 1857 came on, land values fell off, the Rum River, along which the lumber for which stumpage notes were held by the regents, was located, dried up and that source of revenue was cut off. The legislature of 1858 authorized the issuing of bonds for $40,000, secured on lands in Pine, Mille Lacs, and Sherburne counties, of the congressional grant. Only $34,200 was realized from this sale as the interest on the bonds, $5,800, had to be paid in advance. In 1860, the legislature wiped the old organization off the slate and appointed three regents, Messrs. Pillsbury, Merriman, and Nichols, with power to settle the debts of the institution, which then amounted to over $72,000, bearing interest at 12 per cent. By 1864, this board was able to report the debts cleared off and a small surplus on hand. The building and campus, had thus cost the State, in round figures, $125,000. The building was completed, the east end remaining in rough, unfinished state and the whole wing falling into general disrepair, until 1867, when the legislature voted $15,000 for repairs. This was the first direct appropriation ever made for the University by the legislature. The main portion of the building was built from an appropriation of $37,500, made in 1872, and was finished so that the main hall was occupied for commencement in June, 1875. A portion of the west wing was destroyed by fire in 1891; the top floor of the main portion of the building was burned in 1892; the building was totally destroyed by fire September 24, 1904.

Old University Farm. See Experimental Farm.

Oliver, E. C. Instructor in machine designs, 1902-06.

Olsen, John W., St. Paul. Regent ex-officio, state superintendent of public instruction January 25, 1901-08. Born at Copenhagen, Denmark, April 23, 1864; came to America in 1871; Albert Lea high school; Valparaiso, Ind., College, B. S., 1887; taught country schools and was principal of village school in 1890; county superintendent, Freeborn county, 1891-01; state superintendent 1901 to 1908; dean of the department of agriculture from January 1909 to 1910.

Olson, Frederick Adolph, research assistant in medicine 1912-13.

Olson, Mabel. Instructor in home economics, 1913.

Olson, Matthias N. Instructor in political science, 1913.

Olson, Olof August, clinical instructor in surgery 1910 to date.

Olson, Oscar M., in charge of agronomy work of extension division January 1910 to January 1912. In charge of demonstration farms 1912 to March 1913.

Olson, Peter John, born October 12, 1887, at Grafton, N. D.; son of Samuel and Necoline Olson; assistant professor of agronomy, 1913; B. S., in Agriculture, North Dakota Agricultural College, 1910; M. S., in Agronomy, Illinois, 1913; professional experience as director of the department of agriculture in the high school at Alexandria, Minn.; member Alpha Zeta; United Lutheran church.

Omega Psi. An inter-sorority, which was organized in ——, but which has ceased to exist.

One-Mile Liquor Law, The. A state law provides that "it shall be unlawful for any person to sell or dispose of any spirituous, vinous, or malt liquors within the distance of one mile of the Main Building of the University of Minnesota, as now located in the city of Minneapolis; provided, that the provisions of this section shall not apply to that part of the city of Minneapolis lying on the west side of the Mississippi river."

Orations. A book of 152 pages published by Johnson Brothers and Amos, in 1886. It contains a complete file of all orations delivered at the Minnesota inter-collegiate oratorical contests from the beginning 1881 to 1886. Bound in red cloth.

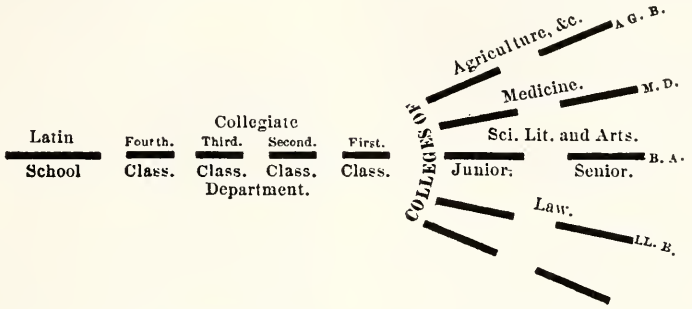
Oratorical Association, The. This association was organized in 1880.

Oratory. The University oratorical association was organized in 1880, for the purpose of fostering the spirit of oratory in the University and for holding contests to choose representatives to compete in the state league which held an annual contest for the purpose of selecting a representative to represent Minnesota in the inter-state contest held each year. The state league was made up of the University and Carleton, and later, in 1883, Hamline came into the league. At first Minnesota was represented by three orators in the state league, but with the coming of Hamline, the number was reduced to two. In 1881, Owen Morris, a Carleton man, won first place and the honor of representing the state, though Minnesota representatives won second, third and fourth places, C. M. Webster, W. W. Clark and F. B. Snyder, coming in the order mentioned. In 1882, Minnesota won first, fourth and fifth places, her representatives being W. W. Clark, S. L. Trussell and J. C. Wilson, coming in the order named. In 1883, Minnesota won first and second places, F. N. Stacy, then a freshman, and S. D. Catherwood, coming in the order mentioned. In 1884, the same result was secured and the University was represented by John W. Bennett and James Gray, in the order mentioned. In 1885, Carleton college dropped out of the league and Minnesota took second, third and fourth places, being represented by F. N. Stacy, T. E. Trussel, and E. R. McKinney. In 1886, the University took first, second and sixth places and was represented by N. M. Cross, F. N. Stacy, and G. E. Burnell. In 1887, the University was represented by A. B. Gould, J. D. Hinshaw and Edward Winterer, and won first and second places. In 1888, the University was represented by J. E. Erf and P. R. Benson, who won second and third places respectively. Macalester was, at this time, admitted into the league, and signalized her entrance by carrying off first honors. In 1889, Minnesota was represented by H. D. Dickinson and T. G. Soares, who won first and second places respectively. In 1890, the University was represented by B. H. Timberlake and H. P. Bailey, who won first and second places respectively. In 1891, Minnesota was represented by B. H. Timberlake and T. G. Soares, who won second and third places. In 1892, the University was represented by P. J. Neff and C. S. Pattee, who won second and third places. In 1893, by C. S. Pattee and W. A. Smith, and took first and third places. In 1894, by Laura Frankenfield and J. G. Briggs, Mr. Briggs took second and Miss Frankenfield fourth place. In 1895, Minnesota was represented by Clair E. Ames and Arthur L. Helliwell, Mr. Helliwell received second place and Mr. Ames fourth. In 1896, Minnesota was represented by A Eliason and W. Pendergast, who took first and second places. In 1897, the University was represented by Booth and Savage. Mr. Booth won first and Mr. Savage third place. In 1898, by E. A. Slocum and F. E. Force, who took third and fourth places. In 1899, for the first time, the winner of first place in the Pillsbury contest, was sent to represent the University in the Northern Oratorical League contest and the winners of second and third places represented the University in the state contest; Joseph W. Beach, won first place and A. J. Finch and F. G. Sasse, second and third and so represented Minnesota in the state contest, winning second and sixth places. In 1900, W. M. Jerome won first place in the Pillsbury contest and represented the state in the N. O. L. contest, while H. G. Spaulding and W. R. Hubbard, won second and third and represented the University in the state contest, where they won second and third honors. In 1901, T. D. Schall, won first and went to the N. O. L. contest as Minnesota's representative, and R. L. Dillman and O. A. Lende, represented the University in the state contest. Lende got fourth place and Dillman was debarred on a technicality. For later years, see under Pillsbury Prize and Northern Oratorical League.

Ore-testing Works. This building is located on the bank of the Mississippi, and was erected in 1894, at a cost of $8,000. $4,100 of this sum was provided by the state and $3,900 by private subscription of

citizens of Minneapolis. It is constructed of white brick and limestone and is 94 x 66 feet. The building provides quarters for the work indicated by its name, and contains the machinery used for such purposes.

Organization of the University. The plan of organization adopted by the regents, to carry out the provisions of the charter of the University, was mainly the creation of President Folwell. The plan is shown by the following diagram:



Remarks—I. The collegiate department, receiving the student from the Latin school or from the public high school, brings him, in the course of four years, to the end of the second (commonly called the Sophomores) year of the ordinary college course. At this point he has his option, whether, equipped with the fair preparation for special studies required in the collegiate department, to enter at once some one of the professional schools as they may hereafter be established, or to proceed with higher academic studies, classical, scientific or literary, in the "college of science, literature and the arts," with a view to securing the best and fullest preparation for professional or technical studies. The courses of study offered in this college cover, at present, a period of two years (Junior and Senior), and lead to baccalaureate degrees.

2. It is a part of the plan of organization that the studies, not only of the Latin school, but also of the collegiate department, shall be dropped off as fast as the high schools can take the work. The University begins wherever they leave off. It is hoped that not very many years may pass before the whole work of the collegiate department will have been assumed by those schools.

Actual courses were organized and instruction was offered in a so-called collegiate department, being the department of elementary instruction called for by the charter of the University; a college of science, literature and the arts; a college of agriculture, which offered work in both elementary and college grade, and plans were formed for offering a "special course

ORGANIZATION OF THE UNIVERSITY.

College	Preparation		Sub Collegiate	Collegiate	Graduate	Degrees
	H S	College	I II III	I II III IV V	I II III	
*The Graduate School	4 yrs.	4 yrs.			x	M. A. or M. S.
					x x x	Ph. D., or Sc. D.
The College of Science, Literature and the Arts	4 yrs.			x x x x		Bachelor of Arts.
				x x x x		B. A. in Music.
The College of Engineering and the Mechanic Arts	4 yrs.			x x x x		Bachelor of Science in C.E., M.E., E.E.Arch.
				x		C.E., M.E., E.E., Arch.E.
The Department of Agriculture						
The College of Agriculture	4 yrs.			x x x x		B.S., in Agr., in Home Economics.
Summer School	4 yrs.			c		Credit on course.
The College of Forestry	4 yrs.			x x x x		B. S., in Forestry.
The School of Agriculture			x x x			Certificate.
The Dairy School			a			Certificate.
Short Course for Farmers			b			Certificate.
Summer School for Teachers			o			Certificate.
School of Traction Eng'r'ng			d			Certificate.
Junior Short course			e			
Northwestern School of Agriculture (Crookston)			x x x			Certificate.
West Central School of Agriculture (Morris)			x x x			Certificate.
The School of Law	4 yrs.	2 yrs.		x x x		LL. B.
Combined course	4 yrs.	3 yrs.		x		B. A.
				x x		LL. B.
The College of Dentistry	4 yrs.			x x x		D. D. S.
Combined course	4 yrs.	3 yrs.		x		B. S.
				x x x x		D. D. S.
The Medical School	4 yrs.	2 yrs.		x x		B. S.
Combined course				x x f		M. D.
School of Nurses	4 yrs.			x x x		Graduate in Nursing.
					x x	Certificate.
The College of Pharmacy	g			x x z		B. Phm.
					x	M. Phm.
					x x	D. Phm.
The School of Mines	4 yrs.			x x x x		E. M., E. M. (geol), Met. E.
The Schoolof Chemistry	4 yrs.			x x x x		B. S. (chem)
				x x x x x		B. A. and B. S. (chem)
				x x x x x		B. S. and Chem. E.
The College of Education	4 yrs.	2 yrs.		x x		B. A. (Educ)
The Summer Session	4 yrs.			o		Credit for work done.

Extension work -- See Statement elsewhere.

* Graduate work done in all departments of the University except Pharmacy and medicine. And an examination in mathematics, or, the five year course must be pursued.

a b d One month each.

o Six weeks.

e One week, beginning last Monday in March.

g Practically all students admitted have completed full high school work.

f one year's service as interne in an approved hospital.

z Students may make this a 2 or 3 year course.

of winter instruction;" a college of engineering offering courses in civil and mechanical engineering and architecture.

The Latin school was dropped at the end of the college year, 1873-74, leaving but two years of preparatory work, as the University now counts college work. The work of the "fourth," or sub-sub-freshman class, was dropped at the end of the college year, 1875-76. The sub-freshman class was not dropped until the close of the college year, 1889-90.

The revised plan of organization which was adopted July, 1874, may be found in the University catalogue of 1874-75, page 33.

Ormond, Alexander T. Professor of mental and moral philosophy and history, 1880-83. Now professor of philosophy in Princeton university, a position he has held since leaving the University.

Orton, Forest Hoy. Instructor in treatment of cleft palate, 1891-93; professor of crown and bridge work 1908 to date.

Oswald, Wieland L., born September 20, 1879, Lancaster, Wis. Lancaster high school; Milwaukee normal and special work in the University of Wisconsin. Four years in the high school at Grand Rapids, Mich. Instructor in agricultural botany 1904 to 1912; assistant professor of same to date. St. Anthony Park, Minn.

Otto, Carl F., student assistant in dental anatomy 1912-13.

Owatonna Tree Station. The Owatonna Tree Station was established by act of the legislature in 1887. Shortly after that the board of regents appointed Mr. E. H. S. Dartt, superintendent. Owing to difficulties in getting control of the land actual operations were not begun until May 4, 1888. This land is a tract of five acres set aside from the land of the State public school on the west side of Owatonna. Its purpose is for the production and development of new varieties of fruits and the thorough testing of fruits and trees.

Mr. Dartt planted thousands of apple trees and collected a large number of seedling and apple trees, giving most of his attention to apples. Upon his death in January, 1903, Mr. Thomas E. Cashman, of Owatonna, was made superintendent and has continued as superintendent ever since.

Owen, Sidney M., Minneapolis. Appointed regent April 28, 1892; re-appointed in 1895 and serving until March, 1901. Reappointed March, 1907. Editor of the agricultural paper, The Farm, Stock and Home. Died February 2nd, 1910.

Owl, The. A co-educational literary organization of the department of agriculture.

Owre, Alfred, born in Norway, December 16, 1870. Graduated in dentistry, University, 1894; M. D., Hamline, '95. Student assistant in dental college, 1893-94; assistant in operative technics, 1894-96; instructor in metallurgy, 1896-97; instructor in operative dentistry, 1897-98; professor, same, 1900 to 1905; dean of the college, 1905 to date. Contributor in dental journals; chapter of Filling Materials and Insertion, in new text book in preparation. Member Twin City academy of dentistry; Twin City dental club; Minnesota state dental association; President, same, in 1902; National dental association; vice-president, same, 1907; Life member Asiatic society of Japan; same of Japan society of London; Corresponding honorary member of the Norwegian dental association of Norway.

Owre, Oscar, born February 13, 1880, Christiania, Norway; son of Lars and Laura Owre; m. Kathryn Riis; one son; instructor in oral surgery 1907 to 1912; instructor in genito-urinary diseases 1910-1912; M. D. C. M., '03. Minneapolis college of physicians and surgeons; interne Minneapolis city hospital; two years in Vienna; research work and publications, Abortive treatment of acute gonorrheal urethritis, Para urethral gland infection, Genito-urinary surgeon to City, Swedish and Lutheran hospitals; member, Alpha Kappa Kappa, Hennepin Co., State and American medical associations, American urological society; Friend.

Paddock, Medora A., registrar and librarian, Crookston school of agriculture, 1910-1911. Now Mrs. J. D. Billsborrow.

Pagenkopf, Alfred A., instructor in crown and bridge work, 1909-12; assistant professor to date.

Paige, James. Born November 22, 1863, St. Louis, Mo.; Scotch, Irish and English ancestry; m. Mabeth Hurd; Law, '99; one daughter; instructor in law, 1890-93; assistant professor, 1893-96; professor, 1896 to date; acting dean of department, 1911-12; A. B., Princeton, '87; A. M., '89; Minnesota, L. L. B., '90, L. L. M., '93; general practice of law for three years; author of Selected cases on the law of crimes, Torts, Agency, Bills and notes, Wills and administration, Domestic relation, Partnership, Note on torts, Crimes and bills and notes member American Bar association, University club, Campus club Presbyterian.

Paine, George P., assistant professor of mathematics, 1910-12.

Palmer, Benjamin Whipple, scholar in economics and political science, 1911-12 to date.

Palmer, Charles C, born July 20th, 1889, at Canton, Ohio, English, German and Irish

ancestry; m. Lucille Long; assistant professor of veterinary science, 1913; D. V. M., '12, Ohio State; professional experience in practice and sanitary work; research work in serum therapy; member Ohio State Veterinary Alumni Association; Methodist.

Parcel, John Ira., instructor in structural engineering, 1909 to date.

Parker, Edward Cary. Born August 4, 1881, St. Paul. St. Paul Central high school, 1899; school of agriculture, 1904; B. S. Ag., 1905. Student assistant in agriculture, 1900 to 1905; assistant agriculturist, 1905 to 1908. Resigned to become agricultural adviser to the Manchurian government.

Parker, Elmer H., clinical assistant in laryngology and rhinology, 1908 to 1910; assistant professor same, 1910 to 1913.

Parker, Luther Wood. Born March 7, 1888; Hertford N. C.; English and Scotch Irish ancestry; instructor in French, 1912 to date; A. B., North Carolina, '07; A. M., same, '08; North Carolina scholar at Johns Hopkins, 1909-11; student in Paris, 1911; Chicago, 1911-12; assistant in French, University of North Carolina, 1906-07; instructor, 1907-09; engaged in work on the influence of English literature on French literature of the 18th century; author of The exciting force in Voltaire's tragedy; member Modern language association of America Alliance Francaise, Odd nmber, Sigma Upsilon; Episcopalian.

Parkin, Arthur W. Born September 18, 1871, Pine Island, Minn. Public school training; Dairy School, Madison, Wis. Thirteen years' practical experience as a butter maker. Instructor in cheese making in Dairy School since 1902-'08; and 1911. Appointed, June 1906, with State Dairy and Food Department as cheese instructor and inspector.

Parsons, Arthur L., instructor in mineralogy 1903-06. Now in the corresponding department of the University of Montreal.

Pasteur Institute. This institute was opened at the medical department of the University in August, 1907. This institute was authorized by the legislature of 1907, and its services are free to all residents of the state of Minnesota. It is operated in connection with the deparment of pathology of the University medical department and is under the direct charge of Dr. Oriana McDaniel.

Pattee, The. A law literary society.

Pattee, William S. Born September 19, 1846, Jackson, Maine. Graduate of Bowdoin College, Brunswick, Me., 1871; M. A., 1874; LL. D., Iowa, 1894. Taught Greek in Lake Forest University, Ill., 1872-74; public schools of Northfield, 1874-78; practiced law from 1878 to 1888; member state legislature, 1884-85. Professor of law and dean of the college from September 11, 1888 to 1911, April 4, the date of his death. Author of many legal works, including Contracts; Real Property; Personal Property; and Equity. Delegate to the Universal Congress of Lawyers and Jurists. St. Louis, 1904. Alpha Delta Phi. See In Memoriam William Sullivan Pattee; see also Minnesota Alumni Weekly, April 10, 1911.

Patterson, Thomas G., assistant professor of animal husbandry, 1913-

Pattridge, Mark Otis, instructor in operative dentistry, 1912 to date.

Paulley, George, foreman demonstration farm at Duluth since May, 1913.

Paulson, Cecelia, clerk, business office, 1912 to date.

Paulson, Irene, clerk, business office, 1912 to date.

Peabody, Eunice D. Born November 25, 1868, Alden, Wis. St. Mary's Hall, Faribault, 1888; Teachers' Training School, St. Paul, 1889; B. A., University, 1904; M. A., 1905. Taught in elementary schools for ten years; assistant in psychology, University, 1905 to 1907 and 1909-10.

Pearce, Delilah, instructor in home nursing, 1912-13.

Pease, Levi B., instructor in assaying, 1902-06; assistant professor of metallurgy, 1906 to 1908; professor of same to date.

Peavey-Dunwoody Prize. From 1903 to 1910. $25 of the amount contributed by Mr. Peavey and his daughter, Mrs. Heffelfinger, with a like amount contributed by Mr. William H. Dunwoody was offered in three prizes of $25, $15 and $10 to the winners in the freshman-sophomore oratorical contest.

1901, J. A. Layne, Peavey prize only; 1902, George Ward, Peavey prize only; 1903, Robert Weiskopf, Peavey prize only; 1903, Dunwoody prize only; 1904, Theodore Christianson, Magnus Aygarn, L. A. Hamlin; 1905, unable to determine facts; 1906, Zenas Potter, Harold Deering, A. Evans; 1907, Sigurd Peterson, Max Lowenthal, Zenas Potter; 1908, unable to determine facts; 1909, Hadden Ostlund, Tillie Will, Merton Hillman; 1910, H. J. Burgstahler, George Gamble, Charles D. Simpson. Discontinued after 1910.

Peavey Prize. In 1901, Mr. Frank H. Peavey offered $100 annually in prizes, to be used by the department of rhetoric at its discretion, for prizes in debate and oratory. On the death of Mr. Peavey, his daughter, Mrs. Frank T. Heffelfinger, continued the prizes in the name of her father. For many years, $75 of this was used to award the winning team in a freshman-sophomore debate. Until 1910, $25 of this amount was combined with a like amount taken from the Dunwoody contribution and awarded to the winner of the Peavey-Dunwoody oratorical contest. This prize was not awarded in 1911-12, but has been renewed, and the total amount is offered to the winning team in an annual freshman-sophomore contest.

The sophomores won this prize in 1901,

1903, 1905, 1906, 1907, 1908, 1910 (1911 one-half of the Rothschild prize money was awarded to the winning sophomore team.) The freshman team won in 1902, 1904, 1909, 1912.

Peck, A. E. L., instructor in crown and bridge work, 1890-91.

Peck, Frank W. Born May 20. 1885, St. Paul, Minn.; American ancestry; m. Hazel D. Blanchard; assistant agriculturist in farm management from 1912 to date; B. S. in agriculture, '12; two years' experience in U. S. department of agriculture investigating cost of producing livestock products; author of bulletins on this work; member American breeders association, American farm management association; Presbyterian.

Peck, Louis W., instructor in physics and drawing, 1874-78. Assistant professor in charge of physics, 1878-79.

Peck, Mary Gray. Born October 21, 1867, Seneca Castle, N. Y. B. A., Elmira; graduate work at the University; graduate work at University of Cambridge, England. Taught English in private and public schools. Instructor in English, University, 1901, to 1907; assistant professor, 1907 to 1909. Author of Germelshausen (in collaboration with Professors Potter and Schlenker).

Peckham, Stephen F., professor of chemistry and physics, 1874-1880.

Pederson, A. C., assistant in the department of loans, University library, 1909 to 1910.

Pederson, Reuben Martin, temporary assistant in genito-urinary diseases, 1911 to date.

Peebles, Thomas, instructor in mental and moral philosophy, 1883-88. See first edition.

Pendergast Hall. Erected in 1889 at a cost of $25,000, is a large, four-story brick building, 54x54 feet. It contains Y. M. C. A. room, small recitation room, and dormitory facilities for ninety boys attending the school of agriculture.

Pendergast, Sophie M., instructor in English, school of agriculture, 1899-01.

Pendergast, W. W., Hutchinson. Regent ex-officio, state superintendent of public instruction, September 1, 1893-January 21, 1899. Born in 1833 at Durham, N. H. Prepared at Phillips Exeter, and in 1850 entered Bowdoin. Came to Minnesota in 1856 and taught school. Appointed clerk in the state department of public instruction in 1882, and principal of school of agriculture in 1888-1803. State superintendent of public instruction, 1893-1899.

Pendergast, Warren W., Jr. Superintendent of the sub-station at Grand Rapids, 1896-97. Died August 26, 1897.

Penny, Lincoln E. Professor (homeopathic) of skin and genito-urinary diseases, 1894-95.

Pensions for Teachers. Address by Professor John H. Gray, delivered before the Faculty Dining Club, November 30, 1907, at the St. Anthony Commercial Club rooms. Printed in full in the Minnesota Alumni Weekly of December 23, 1907.

Peppard, Dr. T. A. Assistant in medicine, 1913.

Percival, Milton, instructor in rhetoric, 1910-12.

Perkins, A. G., student assistant in horticulture, 1911-12.

Perry, Ralph E. St. John. Lecturer (homeopathic) on skin and genito-urinary diseases, 1902-03.

Peterson, Andrew, assistant in chemistry, 1911-12.

Peterson, Peter, instructor in foundry practice, 1906 to date.

Peterson, R. M., assistant and instructor in horticulture, 1913.

Petri, Carl Halmer, instructor in prosthetic dentistry, 1912-13.

Pettibone, Chauncey J. Vallette. Born in October 19, 1884, Fond du Lac, Wis.; American ancestry; instructor in physiology since 1912; University of Chicago, four scholarshps, honorable mention, special honors in chemistry; one year University of Berlin; three years' research assistant in Harvard medical school; one year travelling fellow of Harvard University at Halle, Germany; author of Determination of urea in urine. Untersuchung uber Abbau von Proteinen; Phi Beta Kappa; Presbyterian.

Pettijohn, Earl, instructor in chemistry, 1912 to date.

Pfaender, Albert, instructor in German, 1897-98. Graduate the University class of 1897. Law student, 1897-98. Now practicing attorney at New Ulm, Minn.

Pharmaceutical Association Prize. Nomination for membership in the American Pharmaceutical Association and the first year's dues are offered annually by Dean Wulling to the student in the college of pharmacy earning the highest total average of all standings.

Pharmacy Building (formerly Millard Hall) was completed in October, 1892, at

a cost of $61,000. The building is three stories high, with basement, and is constructed of red sandstone and cream-colored brick, the basement and first story

being of sandstone. It has a frontage of 125 feet and provides 28,000 square feet of floor space. Originally it housed all of the work in the four colleges constituting the department of medicine, medicine and surgery, homeopathic medicine and surgery, dentistry and pharmacy. The name, Millard Hall, was given this building in 1906, in honor of Perry H. Millard, first dean of the department of medicine. Previous to that date it was known as medical hall. The building has suffered through fire four times. The first fire was July 22, 1905, loss to building, $3,540.22; contents, $3,333.45. The second fire occurred October 6, 1908, when the anatomy building burned and injured Millard hall to the extent of $3,931.36. A very serious fire occurred December 24, 1909, the loss being $30,785.27. The last fire was that of March 1, 1912, when the entire interior was burned. The insurance companies paid the University $30,000. Previous to this fire the legislature had appropriated $75,000 to remodel the building and to fit it up for the college of pharmacy. This amount, together with the insurance on the building, enabled the University to remodel the building and make it absolutely fire proof, and at the same time to build a plant house for the college on the foundation of the old anatomy building and to connect the two by an underground passageway. The building now represents a total value of about $140.000, and is one of the best constructed buildings on the campus.

Pharmacy, College of. This college was created and made one of the colleges of the department of medicine in 1892, the legislature having appropriated the sum of $5,000 at its previous session for the initial expenses of the college. Frederick J. Wulling, professor of pharmaco-diagnosis of the Brooklyn College of Pharmacy, and formerly of the faculty of the Columbia University College of Pharmacy, was made dean soon after the creation of the college. The college more than meets the entrance requirements of the American Conference of Pharmaceutical Faculties, and, although in accordance with a tentative agreement with the conference as well as with pharmacists of the Northwest, certain students who have not had a full high school training, but who have had drug store experience are accepted for entrance. Nearly all matriculants of the college are nevertheless high school graduates. The faculty will very soon present a request to the regents for an unqualified high school training as a pre-requisite to matriculation in the college.

By a recent action of the University regents the college will hereafter, beginning with the year 1915, give the degree pharmaceutical graduate, Ph. G., for the completion of the regular two-year course, and which two-year course students are privleged to complete in three years if they so choose. The number choosing three years for the completion of the regular course is increasing constantly. The following courses have also been authorized by the regents; a three-year course leading to the degree pharmaceutical chemist, Ph. C.; a four-year course leading to the degree bachelor of science in pharmacy; a five-year course leading to the degree master of science in pharmacy and a six-year course leading to the degree doctor of pharmacy. By this action the college is retaining its full recognition by the education department of the State of New York and is equalling the requirements and facilities of the best of the colleges of pharmacy of the State of New York, that college also requiring not less than six years for the granting of the degree doctor of pharmacy. The college is thus aiding in the establishment and maintenance of the highest pharmaceutical educational standards.

A good proportion of the work of the college is carried on in its new and very adequately equipped laboratories, and this laboratory work, together with the regular didactic work, is very comprehensive and representative. The college has recently removed into the entirely re-constructed and fireproof Old Millard hall, which is henceforth to be known as The Pharmacy Building. A legislative appropriation, made in 1911 of $75,000, added to an available fire loss, created a fund approximating $110,000, the greater part of which has already been expended in the re-construction of the building and its equipment. Everything in the building is new except the outer walls and part of the hallway. Within the walls and anchored to them there is erected a substantial steel and cement structure, fireproof in every respect. The building is equipped with hot hot and cold water, steam under pressure, gas, air pressure, steam heating with thermostatic control in every room, electric current for light and power, vacuum cleaning system, electric fan ventilating system, elevator, inter-communicating telephones, metal weather strips, metal screens and imported washable window shades. The new furniture, including work tables for students, cupboards, shelving, lockers for stock, library stacks, filing cabinets, safe cabinets, tables, etc., is all made of a heavy gauge steel and covered with olive green baked-on enamel. The building is full four stories high, 60x115 feet in dimensions. The facilities of the college have been greatly enhanced by the establishment of a medicinal plant garden three years ago and by the erection of a medicinal plant house and laboratory on the old anatomy building ruins adjoining the pharmacy building proper. The medicinal plant garden has already received world-wide attention and has been the subject of articles not only in European technical journals, but in South American as well. The plant house and laboratory is the only building of its kind in this country, and in some respects is superior to those of leading colleges of pharmacy of Europe.

The fee for the regular course is $165,

payable in either two or three annual installments.

The State Board of Pharmacy meets at the college four times each year to examine candidates for registration as pharmacists. Graduates of this college are admitted to State Board examinations wherever standards of efficiency are established and its diploma is recognized in all states that recognize diplomas at all.

Pharmacy Green House. This building was erected in 1900 at a cost of $15,000. It is 35x60 feet on the ground, a two story and basement building. Originally it was designed for the use of the department of anatomy and provided the necessary features for such a departure, including an amphitheatre which seated seventy-five students, dissecting rooms, cold storage vauts, etc. Two fires caused a thorough overhauling of the building, when a final fire which occurred October 5, 1908, destroyed it beyond possibility of re-construction. At the request of the college of Pharmacy the regents caused the buiding to be razed to its foundation and erected thereon a green house for the use of the college of Pharmacy. In this green house medicinal plants are cultivated, furnishing material for laboratory work the year around. The building, before its final destruction by fire, represented, with equipment, upward of $25,000. It is now valued at $15,000.

Phelan, Anna Augusta Helmholtz. Born at Sturgeon Bay, Wis., German ancestry; instructor in rhetoric since 1908; A. B., Wisconsin, '05; A. M., Wisconsin, '06; Ph. D., Wisconsin, '08; graduate scholar, Wisconsin, 1905-06; Mary M. Adams fellowship in English literature, Wisconsin, 1906-07; assistant instructor in English, Wisconsin, 1907-08; reporter, assistant editor and manager Door county Democrat, Wisconsin, for four years; research work in English literature. In Elizabethan and restoration ages, and in the romantic and victorian eras; author of The Indebtedness of Samuel Taylor Coleridge to August Wilhem von Schlegel; The social ideals of William Morris, The staging of the court drama; chairman of the social economics department of the Minneapolis Woman's club, member of committee on the vocational survey of Minneapolis, member of committee on child welfare exhibit, representative of the Woman's club to the infant welfare society of Minneapolis. member Phi Beta Kappa, Woman's welfare league, Mpls. public health survey committee, member various club and societies related to work, including Modern language association of America.

Phelan, Raymond Vincent. Born in Cleveland, Ohio; father Canadian Irish ancestry and mother American Irish ancestry; instructor in economics, 1907-12; instructor enonomics (social) extension division, 1912 to date; Ph. B., Western reserve university, '02; A. M., same, '04; Ph. D., Wisconsin, '06; graduate scholar, Wisconsin, 1904-05; University fellow, 1905-06; private tutor, 1901-04; special agent Wisconsin tax commission, summers 1905, '06, '07; assistant professor of economics, Miami, 1906-07; business experience in mercantile, express and banking; research work in public finance and social economics; author of The financial history of Wisconsin, Outline for economics, various articles on economic reforms, labor, hygiene, banking and taxation; contributor to Westminster Review, Moody's magazine; Bankers' magazine, American economic review and other publications; investigator Woman's welfare league, chairman special legislative committee, Political equality league, anti-tuberculosis lecturer, social center promotion, member board of directors Minnesota Association for labor legislation, American association for labor legislation, Am. statistical association, Am. economic association, National tax commission, Minn. Academy of social science, Woman's welfare league, Social service club of Minneapolis.

Phelps, A. G., assistant in (homeopathic) clinical medicine and physical diagnosis, 1903 to 1909.

Phelps, Ruth Shepard. Born June 18, 1876, Aurora, Ill.; English ancestry; instructor in Italian since 1910; B. A., Smith, '09; M. A., Columbia, '10; author of "Skies Italian," 1910, numerous magazine essays and poems, "Sonnets and Songs," by Arthur Upson (edited), Mosher, Portland, 1911; member Modern language association.

Phi Alpha Gamma. Established at New York Homeopathic Medical College in 1894. Minnesota chapter established in 1897.

Phi Beta Kappa (Alpha chapter in Minnesota) was established December 13, 1892. It has 357 members and elects each year one-twelfth of the senior class of the colleges of science, literature and the arts and education. Election to membership is based mainly on scholarship, though it is provided that graduates and persons distinguished in letters, science or education may be elected. Its purpose is the promotion of scholarship and friendship among students and graduates of American colleges. Phi Kappa stands for scholarship in all the elements of a liberal education, specialization in one department being recognized only if based upon excellence in others. The society desires neither those who by mere plodding have attained to average excellence in several lines of study without giving evidence of superior interest and ability in any, nor those who have shown power in a single direction to the exclusion of an intelligent interest in others. The society provides occasional addresses by distinguished speakers and holds an annual initiation, at which an address is given by the president of the chapter. There was a general revision of the constitution and by-laws adopted in 1905.

Phi Beta Pi. Xi chapter established in 1903. Medical fraternity.

Phi Delta Chi (Pharmacy). Founded at Michigan in 1883; established at Minnesota a Theta chapter in 1904.

Phi Delta Kappa (Education.) Founded at Indiana in 1910; established at Minnesota in same year.

Phi Delta Phi. (Law fraternity.) Dillon chapter established in 1891. Founded at Michigan, 1864.

Phi Delta Theta. The second fraternity to be established at the University. The Minnesota chapter established in 1881, the national chapter at Miami University in 1848.

Phi Gamma Delta. Mu Sigma chapter established in 1890. Founded at Jefferson college in 1848.

Phi Kappa Psi. Minnesota Beta chapter established in 1888. Founded at Jefferson college in 1852.

Phillips, E. M., special lecturer in college of education, 1913.

Philomathian Literary Society was organized October 19, 1907, with an original membership of forty, which has since been increased to fifty. This society is co-educational. Its purpose is improvement in public speaking, debate and the use of parliamentary rules. Its activities include literary and business meetings held on Monday evening of each week during the college year. Topics of the day are discussed and occasional social entertainments are provided.

Phi Rho Sigma. Tau chapter established in 1903. Medical fraternity.

Phipps, Elizabeth B., assistant in domestic art, 1911-12.

Phi Sigma Kappa. Founded at Massachusetts agricultural college in 1873; Beta Delta chapter, established at Minnesota in 1910.

Phi Upsilon Omocron (Agricultural sorority.) Founded at Minnesota in 1910, succeeding the Home Economics club.

Physical Education, Department of. Men's division embraces the gymnasium, with a variety of gymnastic appliances, 1,200 lockers, 32 shower baths and a regulation swimming pool. The object of the department is to provide all the students of the University opportunity for exercise to build up their general health. It also provides special training to correct physical defects and functional derangements, as well as recreative and competitive games. The department is in charge of a professional medical director and assistants, and the training is under their direct supervision. A physical examination is required of all new matriculants and others using the department privileges, and a record is made of the same. The examination of these records shows a marked improvement in the standard of health of the average student during his college course.

The department privileges are extended to all men of the University who conform to the customary regulations.

In some of the colleges and schools of the University attendance in gymnasium is required of all freshmen.

Physical Education for Women. The department is intended to look after the health of the women students of the University. New students are examined and advised, conducts systematic yearly consultations and examines when necessary upper class students. Courses in hygiene are offered, and the work in physical training is organized so as to meet the needs and tastes of the students as far as possible. Close co-operation with the woman's athletic association is maintained and athletic sports are organized and encouraged. Cases of illness in dormitories and boarding houses are investigated and a sanitary inspection of boarding houses for young women is conducted. Suitable exercise is advised in the case of all incoming students and required of those whose physical condition indicates the need of such training.

At the present time the department is housed in the north wing of the Armory. An appropriation of $125,000 was made by the legislature of 1913 for a gymnasium for women. The building will be erected in the near future adjoining Alice Shevlin Hall. The department is in charge of Dr. Anna Norris.

Physics Building. This building cost $55,600. This was provided by two appropriations, one of $25,000 in 1899, and one of $50,000, in 1901, the balance of the appropriation went into equipment. The building is practically fire proof and is two stories high, with high basement. It is built of light tinted brick and is 68x115 feet. It provides 23,500 square feet of floor space for the department of physics to whose use it is wholly devoted. The basement contains laboratories for advanced research work, dark room for research work in optics, rooms and apparatus for the production of liquid air, a constant temperature room, battery room, students work shop and mechanical room, precision room, an electric standard room and janitor and toilet rooms. The first floor is provided with office rooms with fire proof vaults attached, two recitation rooms, 28x34 feet, private laboratory and physics library room, private research laboratories, general physics laboratory with attached store room and balance room. The second floor contains laboratories for

research, chemistry, for under-graduate work in electricity, dark room, apparatus room and preparation room, store room and lecture room, 38x58, equipped with 310 desk arm seats.

Phi Beta Nu. An honorary society founded by the seniors of the class of 1888, whose object was to promote the study of science, literature and the arts and to mark distinguished merit in faithful performance of duties at the University of Minnesota. The founders were Helmus Wells Thompson, Albert Graber, William Dodsworth Willard, Albert Ames Finch and Ulysses Sherman Grant. The membership was not based wholly on marks, but lists of men recommended by the various departments of the University submitted lists of the men they considered the strongest in the junior class, these were arranged in order of designated preference, and the first ten chosen as a tentative list, and the outgoing members elected five from this list, to constitute the society for the following year. This society continued in existence until the establishment of Phi Beta Kappa, a national society of similar aims and ends, December 13, 1892.

Pi Beta Phi. Alpha chapter established in 1890, re-established in 1906. Founded at Monmouth college in 1867.

Pierce, Delilah, instructor in nursing, school of agriculture.

Pierce, Ernest Boynton. Born August 20, 1870, St. Paul, St. Paul mechanic arts high school, 1897; Mankato normal, 1898; B. A., University, 1904. Taught district school one year; graded school one year; Mankato high school one year. Assistant registrar, 1904-05; registrar, 1905 to date.

Pierce, Judge James O. Lecturer on the law of domestic relations, 1888-89, lecturer on constitutional and statutory law, 1889-92. From 1892 to date of his death, 1907, Judge Pierce was lecturer on constitutional jurisprudence and history. Judge Pierce was a prolific contributor to legal and semi-legal periodicals and the author of Studies in Constitutional History. He was at one time judge of the Circuit court of Memphis, Tenn.

Pike, Jay N. Born October 1, 1876, Lake City, Minn. University college of engineering, Massachusetts institute of technology; Dental college, University, 1903, Demonstrator in operative dentistry, 1903-05; instructor in prosthetic dentistry, and dental anatomy, 1906 to 1909; in orthodontia, 1909-10; clinical professor same, 1910-12; associate professor, 1913.

Pike, Joseph Brown. Born Jan. 22, 1866, Chicago, Ill.; m. Helen Gage Lyall; instructor in French and Latin, 1892-95; assistant professor of Latin, 1896-03; professor of Latin, 1903- to date; B. A., '90; holder of '90 class fellowship; M. A., '91; lecturer Univ. of Iowa summer 1893; author of Pike's selected lives of Suetonius, various articles in periodicals, classical philology and classical journal; member Archaelogical institute, vice president of Classical association of middle west, Twin City classical club, Phi Beta Kappa, Psi Upsilon.

Pike, Wm. A., professor of engineering in charge of physics, 1880-91; secretary of the faculty of the college of engineering, 1880-86; director of the college of engineering, 1886-90; dean of the same, 1890-91; resigned to take up private practice; deceased. See first edition.

Pillsbury Hall. So named in honor of its donor, Governor John S. Pillsbury, who erected the building in 1889, at a cost of $131,000, and presented it to the state. The building is two hundred forty-five feet long, and is constructed of sandstone, the basement of red and the upper stories of white with an occasional red stone mixed in. The building is a two story and high basement building. It provides quarters for the departments of animal biology, botany, geology, mineralogy and paleontology. The University museums are also located in this building. The departments of animal biology and botany are soon to remove to a new building and the remaining departments will occupy the whole building. For statement of circumstances leading to making this gift, see printed address made by Governor Pillsbury before the alumni in June, 1893.

Pillsbury, John Sargent. Regent November, 1863-March 4, 1864; March 4, 1864-February 18, 1868; March 2, 1868-January 7, 1876, when he became regent as Governor of the state, continuing to hold office by virtue of his being Governor until January 10, 1882; appointed February 1, 1882 and re-appointed regularly until March 27, 1895, when he was made regent for life, holding the office until the day of his death, October 18, 1901.

Governor Pillsbury, "Father of the University," was born July 29, 1828. He came to Minnesota in 1855. Was married to Mahala Fisk, November, 1856. He was engaged in the hardware business from date of coming to Minneapolis to 1875, when he sold that business to devote himself mainly to milling business. He was a member of the city council for six years. Elected to the state senate in 1863 and served continuously for ten years. Elected governor in 1875, again in 1877 and 1879. He gave the University the magnificent

science building, which is known by his name, in 1889. In 1892 he presented his native town with a fine city hall in memory of his father and mother. In 1898, in conjunction with his wife, he established an endowment fund of $100,000, for the erection of a home for children and aged women. In same way he erected a home for working women, in 1900, at a cost of $25,000. In 1901 he gave the city of Minneapolis a fine library building, erected at a cost of $75,000, known as the Pillsbury branch of the public library. Pillsbury statue was erected in his honor and dedicated in September, 1900.

As it would be impossible to give here full information concerning Governor Pillsbury's services to the University the following references are given to material easily available to anyone interested: The Minnesota Alumni Weekly of October 21, 1901; also June 5, 1902. Pamphlet containing full report of the exercises of the memorial services held at Commencement of 1902. For the story of his early connection with the University see pamphlet containing speech of Governor Pillsbury at the Alumni banquet held at the West hotel, June 1, 1893.

Pillsbury, John S., Scrapbook. A collection of newspaper clippings made at the time of the death of Governor Pillsbury in 1901. Deposited in the University library.

Pillsbury Memorial, Fence. This fence which extends along University avenue from 14th to 17th avenues was erected in the summer of 1902 by Mrs. Sarah Pillsbury Gale, 1888, in memory of her father, John S. Pillsbury. The fence is of stone and iron and ornamental design. The main gateway is at 14th avenue.

Pillsbury Prize, The. Three prizes of $100, $50 and $25 are offered by the heirs of the Honorable John S. Pillsbury, awarded for the best work in the department of rhetoric, as evidenced finally by an oration in public. These prizes were established in 1888. The first contest, however, appears to have been held June 6, 1889, and T. G. Soares, O. L. Triggs and Henry Johnson were the winners, June 2, 1890, T. G. Soares, B. H. Timberlake and M. D. Purdy were the winners. June 1, 1891, M. D. Purdy, P. J. Neff and J. O. Jorgens were the winners. May 29, 1892, W. A. Smith, C. S. Pattee and Albert D. McNair were the winners, and were also by virtue of having won this contest made the University representatives in the state contest. This plan was followed until Minnesota dropped out of the state contests in 1901. In 1893, Estelle Sinsheimer and Arthur L. Helliwell won. March 15, 1894, John G. Briggs, Laura Frankenfield and William A. Smith won. In 1895, Clair F. Ames, Arthur L. Helliwell and James Steenson were the winners. March 14,1896, A. O. Eliason, W. W. Pendergast were the winners. In 1897, L. T. Savage, L. N. Booth and J. B. Miner won. March, 1898, E. A. Slocum, F. E. Force and Joseph W. Beach won. In 1899, Joseph W. Beach, A. J. Finch and F. G. Sasse won. In 1900, W. M. Jerome, H. G. Spaulding and W. R. Hubbard won. In 1901, T. D. Schall, R. L. Dillman and O. A. Lende won. In 1902, T. D. Schall, J. A. Layne and J. G. Steenson won. In 1903, G. P. Jones, J. A. Lane and J. G. Steenson won. In 1904, G. P. Jones, A. J. Bushfield and W. I. Norton won. In 1905, Theodore Christianson, Fanny Fligelman and H. L. Brockway won. In 1906, Lucile Way, O. B. Flinder and Fanny Fligelman won. In 1907, Vivian Colgrove, Louis Schwartz and Algernon Colburn won.

In 1901-02, the Pillsbury and Dunwoody prizes were combined and offered for the same purpose as the Pillsbury prizes were offered.

1908, Clarence F. Harter, Louis B. Schwartz, Zenas Potter; 1909, T. R. Dahl, Sigurd H. Peterson, Zenas Potter, as Mr. Dahl held a college degree, Mr. Peterson

represented Minnesota in the Northern Oratorical League contest; 1910, Edwin W. McKeen, Chester L. Nichols, Rhoda J. Dickinson; 1911, Marc Fraser, Victor E. Bruder, Anna Campbell; 1912 H. J. Burgstahler, Franklin Tonne, Miles McNally; 1913, Lillian Byrnes, Fred Tryon, Gustav P. Warber.

In 1902 Governor Pillsbury gave $100 to encourage debate among the sophomores, and I. A. Churchill, A. F. Kovarik and J. P. Krantz won.

Pillsbury Statue. Dedicated September 12, 1900. This statue was erected by alumni and friends of the University and by the alumni presented to the University, as a token of honor and appreciation of the services of Governor Pillsbury to the University. The committee which had the raising of the funds in charge consisted of the following named gentlemen: Edward C. Chatfield, 1874, George H. Partridge, 1879, James A. Quinn, Ex-'76, and Lewis S. Gillette, 1876. The statue is of bronze, heroic size, mounted on a pedestal of granite. The sculptor, Daniel C. French, is recognized as one of the foremost sculptors of his day, and this creation is one of his masterpieces. For fuller information, see pamphlet, "The unveiling of the statue of John S. Pillsbury."

Pinafore, an organization of young women of the sophomore class.

Pine, Ella, instructor in domestic science, 1912-13.

Pinter, Ralph, instructor in psychology, 1913.

Pi Sigma, an honorary engineering society established in 1894.

Pitchford, G. L., instructor in chemistry, 1909-11.

Pittenger, B. F., instructor in college of education since 1913; Michigan state normal, '06; bachelor of pedagogics, '07; B. A., '08; M. A., Texas, '12; 1912-13 graduate student Chicago; taught in public schools, 1902-04; assistant in public speaking state normal at Ypsilanti, Mich., 1906-07; professor of education, Fairmount College, Wichita, Kansas, 1908-11; taught in summer schools of Missouri, Texas and Illinois.

Plaisance, G. P., computer in animal nutrition, 1913.

Platform Club, an organization of men interested in forensic work. Founded in 1911.

Point System. The young women of the University have adopted a point system to govern the honors which any young woman, in any class in the University may attain. The plan is to attach a certain number of points valuation to each office to which any women in the University may be elected and to fix the number of points which any young woman may receive in any one year of her college course. Seniors and juniors may attain 30 points, sophomores 20 and freshmen 10 points. The valuation of the offices varies from 25 points for the presidency of the woman's self government association to five points for chairmanship of committees. The idea being to secure a greater distribution of honors and responsibilities and to prevent the over-burdening of a few with too many public duties.

Pollock, Lee W., demonstrator in pathology and bacteriology, 1912-13.

Pomery, James L., assistant in cultures and starters, 1911.

Poppe, Frederick Harold. Born June 27, 1882, Milbank, S. D.; Norwegian and German ancestry; m. Florence Eula Paul; one child; clinical assistant in surgery—; clinical instructor in surgery, 1911 to 1913; instructor in surgery, 1913-; A. B., '04; M. D., '07; experience in hospitals and as assistant to surgeons; member State Hennepin Co. and American medical associations, Sigma Xi; Congregationalist.

Poppe, Frederick W., assistant in chemistry, 1911-12; instructor in same to date.

Poore, Orson B., instructor in drawing, 1910-11.

Porter, Edward D., professor of theory and practice of agriculture, 1880-87. Professor Porter was in charge of the agricultural department during the transition stage and played a large part in the development of the solution to the problem reached by the University, as exemplified in the school of agriculture and in the establishment of the farmers' institutes.

Portraits in Oil. The University has a number of interesting and valuable oil portraits of men who are or have been connected with the University, including a portrait of Dr. William Watts Folwell, first president of the University, which hangs in the reading room of the library. This portrait was painted by Emily Dana McMillan, '82, and presented to the University by her class.

A portrait of President Cyrus Northrop, by W. W. Churchill, hangs in the office of the president. It was presented to the University by Greenleaf Clark.

A portrait of John S. Pillsbury, painted by N. R. Brewer, hangs in the office of the president. The portrait was presented by the family of Governor Pillsbury.

A portrait of the Reverend E. D. Neill, chancellor of the University, 1858-1861, painted by A. Bradish, hangs in the office of the president.

A portrait of Dr. Jabez Brooks, professor of Greek, painted by Russell, was presented to the University by friends of Dr. Brooks and hangs in the rooms of the Greek department in Folwell Hall.

A portrait of Professor Maria L. Sanford by Grace McKinstry hangs in Shevlin Hall. The portrait was presented by friends who contributed toward its purchase.

A portrait of Greenleaf Clark, president of the Board of Regents, painted by W. W. Churchill and presented to the University by Mr. Clark, hangs in the office of the president.

A portrait of Dean Frederick J.

Wulling, painted by Robert S. Koehler, and presented to the University by alumni of that college, hangs in the reading room of the library.

A portrait of Dean Perry H. Millard, painted by Emily Dana McMillan and presented by the faculty, hangs in the New Millard Hall.

A portrait of Dean Parks Ritchie, painted by——, and presented by the faculty, hangs in New Millard Hall.

A portrait of Dr. Adolphus F. Elliott, by Clawson, presented to the University by Dr. Elliott's brother, Frank M. Elliott, hangs in Elliott Memorial Hospital.

Posey, Chessley Justin. Born January 26, 1873, at Troy, Ill.; American ancestry; m. Maude Johnston; two sons and one daughter; assistant professor of geography, 1913, to date; graduated from Ill. state normal university, '95; S. B. Ill., '00; S. M., Chicago, '05; member Ill.-Ind. debating team of 1899; thirteen years' experience in teaching in public and state schools; member Sigma Xi, A. A. A. S., National geographic soc., American forestry association; Congregationalist.

Postelsia. The yearbook of the Minnesota seaside station. Vol I was issued in 1901 and contains seven essays. Vol. II. was issued in 1906 and contains seven essays, or papers.

Postoffice. The University postoffice was originally owned and controlled by the University and managed by the registrar. With the growth of the University this branch became too much of a burden to be cared for and was taken over by the proprietor of the University book store and was managed by him for several years. When the book store removed from the campus, the postoffice was managed by the business manager of the Ariel, who employed a stenographer to take charge of the office, the fees for boxes paying the necessary expenses. The post office was finally placed in charge of Miss Clara Poucher, who devoted her whole time to the work, receiving the rental fees for her services. Later, 1904, J. C. Poucher, a brother of Miss Poucher, was placed in charge of the postoffice and has continued in charge to this day. The postoffice was formerly located in the basement of the old main building, but when that building was burned, it was removed to the rotunda of the library building. With the completion of Folwel hall, in 1907, the postoffice was transferred to room 25, set apart for the purpose.

In 1911 the University took over the postoffice again and employed Mr. Poucher to take charge of it. In the fall of 1912 the postoffice was again moved to the basement of the old Mechanic Arts building, which had been remodeled for its use.

Potter, Dr. A. C., assistant in out-patient department, 1913.

Potter, Frances Boardman Squire. Born November 12, 1867, Elmira, N. Y. B. A., Elmira, 1887; M. A., same, 1889; honorary alumna, University, 1904. Studied French language and literature in France, 1891; research work in English, Cambridge university, England, 1906. Taught in Elmira college, French and mathematics, 1889-90; senior English teacher, Minneapolis east high school, 1899. Instructor in English, University, 1900-04; assistant professor, 1904-07; professor, same, 1907 to 1909. Author of Germelshausen, in collaboration with Professors Schlenker and Peck; magazine stories under name of Frances Boardman; The Ballingtons (novel), Frances Squire; short stories and pedagogical articles, Frances Squire. Member Lyceum club, London, 1906; Society American women in London, 1907; education committee of the General federation of women's clubs of the United States.

Potter, Franc M., University editor, office of the registrar, since September, 1910. B. A., '93 ,M. A., '95.

Potter, Marion, instructor in English, 1899-01. Graduate of the University, class of 1897. Now editor of the U. S. Catalog and the Cumulative book index, published by the H. W. Wilson company of this city.

Poucher, Jay C., postmaster, 1909 to date; and inventory clerk since 1913.

Poumerlie, Charles, assistant in horticulture, experiment station, 1887-89.

Powell, John Walker. Born at Blue Earth, Minn., March 22, 1872; American ancestry; m. Louise Pettay; two sons and one daughter; director of the religious work of the Young Men's and Young Women's Christian Associations since 1912; B. A., Minnesota, '93; S. T. B., Boston University, '07; D. D., Syracuse, '11; has served as pastor in Minneapolis and Duluth Methodist churches; has given many popular lectures on literature before women's clubs, notably in Duluth and Milwaukee; has published "The Poet's Vision of Man," Crowell & Co., '01; "The Silences of the Master," Jennings and Graham, '04; member Religious Education Association; Methodist.

Powell, Louise N., superintendent of school for nurses, 1910 to date.

Powell, Ransom J., librarian of the college of law, 1896-98; instructor in justice practice, 1898-02.

Powell, Warren Thompson, instructor in rhetoric, 1911 to date.

Power Dam Project. The proposition to utilize the power to be developed at the government high dam, which is being constructed at Fort Snelling on the Mississippi river, for the benefit of the University, was first suggested by Professor

Benj. F. Groat, Eng. '01. The engineering alumni took up the suggestion with enthusiasm and since Mr. Groat's suggestion, which was made early in the year 1909-10, have been pushing the proposition to secure for the University the benefits of the power to be developed at this dam. A fair statement of the proposition may be found in the Minnesota Alumni Weekly of January 10, 1910. Progress has been made and at the meeting of the engineering alumni held April 3, 1913, Mr. E. P. Burch reported upon the matter very fully. His report will be found in the Minnesota Alumni Weekly of April 7, 1913.

Chemistry Building, Department of Agriculture

Power House. This building was erected in 1887 at a cost of $18,000. It has been remodeled at various times at an additional cost of $43,000. At the present time $26,000 additional are available for additional changes. When these changes have been made the building will represent an investment of $87,000 with its equipment. This includes heat mains, etc.

Pratt, Chelsea C., junior demonstrator in pathology and bacteriology, '06-'07; clinical assistant in medicine, 1911-13. M. D., University, 1906.

Powers, H. H., horticulturist of the Crookston experiment station, 1907-1911.

Pratt, Fred John, clinical assistant in ophthalmology and otology, 1912-13.

Preparatory Department. This department was organized by the special board of three regents and opened for instruction October 7, 1867. The legislature of the previous year had made an appropriation of $15,000 "to be expended in repairing and furnishing the University building, and for the employment of a teacher or teachers for the purpose of commencing the grammar and normal department of the University of Minnesota." This sum was spent as follows: $5,804.38 for current expense, including salaries, and the balance for repairs. The faculty of this school consisted of W. W. Washburn, principal and instructor in German and Latin, Ira Moore, mathematics, E. H. Twining, natural science, and A. J. Richardson, English branches. The attendance, during the first session was 72, of which number 16 were young women. The enrollment of the second session was 109, including 35 women. The enrollment for the third session was 146, including 38 young women. The formal organization adopted by the regents and the election of the first University faculty, August 23, 1869, closed this chapter of University history.

Presidents of the United States. Presidents of the United States have spoken at the University as follows: William Howard Taft made the commencement address in 1911, while secretary of war, and made an address at the opening convocation in the fall of 1911.

Theodore Roosevelt spoke at the University April 4, 1903, to the students and faculty assembled in the University chapel.

Governor Woodrow Wilson spoke to the students in chapel in the spring of 1911 and again at the opening convocation in the University Armory in the fall of 1912, just prior to his election to the presidency.

Pressnell, Myrna C. Born at Duluth, Minn.; B. A., Minnesota; instructor in literature and chorus work at Morris School of Agriculture.

Press Service and Bulletins. During the year 1912-13, twenty-four numbers of the Farm Press News were published and distributed to newspapers in Minnesota and adjoining states, and the following bulletins were issued: No. 19, Domestic science in rural schools, Mary L. Bull; No. 20, Soil tillage, O. M. Olson; No. 21. The care soil tillage, O. M. Olson; No. 21, The Brown; No. 22, Establishing an orchard, K. A. Kirkpatrick; No. 23, Some common insects and their control, F. L. Washburn; No. 24, Seed testing, W. L. Oswald; No. 25, Annual pasture, soiling and hay crops, Andrew Boss; No. 26, Seed grain, Andrew Boss and C. P. Bull; No. 27, Flax growing, C. P. Bull; No. 28, Tuberculosis, C. Easton and C. R. Barns; No. 29, The keeping of dairy cow records, A. J. McGuire; No. 30, Marketing eggs from the farm, N. E. Chapman. In addition each month a four-page leaflet has been mailed to all the rural school teachers of the state. These leaflets are designed to arouse an interest in the study of agriculture; 42,000 names are now on the mailing list to receive agricultural division bulletins.

Preston, Charles Herbert. Born in 1876, Wisconsin; New England ancestry; m. Ruth L. Pierce; two daughters; instructor extension work in economics, 1910 to 1913; assistant professor business administration to date; in charge of extension work in business subjects, 1913 to date; B. A., Wisconsin, '06; seven years' experience in high school work; three years' experience in mercantile business; expert in accountancy; member American economic association; Presbyterian.

Priester, George C., instructor in mathematics, 1912 to date.

Price, Richard Rees. Born May 23, 1875, at Hafod, Wales; ancestry Welsh on both sides of the family; m. Louise Snow Wood; one daughter; appointed Director of University Extension on July 1, 1913; A. B., Kansas, '97; A. B., Harvard, '00; A. M., Harvard, '01; two years' experience as high school teacher, one year as high school principal, seven years superintendent of city schools, four years director of University extension, University of Kansas; four years' experience as editor of a school paper, The Interstate Schoolman; three years secretary-treasurer of the League of Kansas Municipalities; research work, a thesis on Bribery in Roman Elections; has published a few magazine articles; has been interested in promoting good municipal government as secretary of the League of Kansas Municipalities; member Phi Beta Kappa; Presbyterian.

Prizes. The John S. Pillsbury; the Frank H. Peavey; the Dunwoody (discontinued); the Maurice L. Rothschild (discontinued); the '89 Memorial; the Frank O. Lowden; the Andrew Lanquist; the William Jennings Bryan; the Rollin E. Cutts; the Alumni Weekly Gold Medal; the J. W. Bell, the Mercer; the Briggs Foundry Practice; the George C. Andrews; the Pharmaceutical Association.

Prohibition Club. An organization of men interested in promoting the progress of the prohibition movement.

Psi Upsilon. Mu chapter established 1891. Founded at Union college in 1833. 310 Twelfth avenue southeast. This fraternity absorbed the local fraternity, known as the Theta Phi, which was established in 1879.

Pulling, A. C., librarian law school since 1912.

Punderson, James, statistician, Northfield, 1911-12.

Purcell, Richard Joseph, scholar in history, 1911-12.

Puritan Colony Scholarship Loan. The Puritan Colony of the National Society of New England Women in— established a loan fund for women students of the University. For the year 1912-13 this scholarship loan amounted to $100. It is available for women students of New England birth or ancestry. In awarding it the preference is given to young women in the junior and senior classes.

Pyle, Dr. C. A., instructor in physiology, department of agriculture, 1908-10.

Qualitative basis of graduation. Professor Norman Wilde wrote an article upon this subject which was published in the Minnesota Alumni Weekly of November 15, 1909.

Quarterly Bulletin, The. Published from May, 1892, to June, 1894, six numbers, by the University. Edited by a committee of the faculty. Professor Conway MacMillan, editor-in-chief.

Quense, J. H., instructor in drawing, 1903-06.

Quigley, Edward G., assistant professor of education, 1909 to 1913.

Quigley, Edward P., instructor in forge work, 1909 to date.

Quigley, Samuel. Born January 26, 1873, Princeton, Minn.; Irish, Scotch and English ancestry; assistant professor of education, 1911 to date; acting director of extension work, 1912 to 1913; A. B., Iowa, '06; A. M., Chicago, '11; one year graduate work at Harvard, 1905-06; has had much experience in teachers' institute work; member Phi Delta Kappa; Methodist.

Quill, The. A good-fellowship club, the members of which are elected from among the young women connected with the various publications of the University. Founded in 1903.

Ramaley, Francis, instructor in botony and pharmacology, 1894-95; instructor in botany and practical pharmacognosy, 1895-97.

Ramsey, Alexander, St. Paul 1851-56; Ex-officio regent, governor of the state, February 14, 1860-July 10, 1863. "War governor" of the state.

Ramsey, Walter R., assistant in medicine, 1900-03; assistant in pediatrics, 1903-05; clinical instructor in diseases of children, 1905 to 1909; clinical professor, same to 1913; assistant professor of pediatrics, 1913.

Rahn, Carl Leo, instructor in psychology, 1912 to date.

Ramstad, Otto, scholar in economics and political science,1911 -12.

Randall, Clarence B., instructor in drawing and farm buildings, 1902-04.

Randall, Eugene W. Born January 1, 1859, Winona, Minn. High school and normal school. Principal of the Morris, Minn. high school, two years. Other experience in country schools. Regent of the University, 1904 to date of resignation, June 13, 1907. Dean and director of the department of agriculture, 1907 to December, 1908. Secretary of the State agricultural society, 1895-07.

Rankin, Albert William. Born September 19, 1852, Brompton, Canada; father Scotch and mother of old New England ancestry; m. Jean Sherwood; two daughters; associate professor in college of education, 1906 to 1908; professor since 1908; B. A., '80, valedictorian; fourteen years' experience as superintendent of city schools; eleven years' experience as state inspector of graded schools; for a time

editor of School education; most of his research work has been along practical lines of educational work; has been president of the Minnesota state teachers' association and for forty years has been closely associated with all advanced movements in education; studied school systems under Col. Parker at Quincy and under Balliet at Springfield, and with Hall at Clark University; for many years visited Dewey's work at Chicago; has written much for current periodical literature; has always been active in local and state politics, serving on committees and as director of political clubs and organizations of various sorts; member Society for the scientific study of education of the N. E. A.; Unitarian.

Rankin, John Owen, editor of agricultural bulletins since 1912; ranks as professor.

Rankin, Jean Sherwood, instructor in education, 1907 to 1909.

Rarig, Frank M., assistant professor of rhetoric, 1908 to date.

Rastall, B. M., assistant professor of economics, 1908-09.

Rawson, Ralph H., instructor in drawing, 1906-07.

Read, H. K., demonstrator of anatomy, 1899-07.

Reamer, E. F., assistant in ophthalmology and otology, 1899-02.

Reed, Charles Anthony, clinical assistant in orthopedic surgery, 1910-11; clinical instructor in orthopedic surgery to 1913; assistant in orthopedics, 1913-

Reed, Frank E., manager of athletics from January, 1904, to January, 1908. B. A., '02; LL. B., '04.

Reely, Mary Katharine, scholar in rhetoric, 1911-12.

Reep, Samuel Nicholas, born June 21, 1877; American and German ancestry; m. Grayce A. Austen; one son; assistant professor of sociology since 1907; A. B. Drake; Ph. D., Chicago; business manager and conductor of European parties; research work in social theory and psychology; chairman of finance committee of Minnesota Woodrow Wilson campaign; member American Sociological society, Minneapolis Social Service Club; Evangelical association.

Rees, Soren P. Born September 27, 1870, in Denmark; m. Estelle Crocker; one son; instructor in physical diagnosis and clinical medicine, 1901 to 1911; clinical professor of medicine, 1911 to date; chief of medical clinic, 1913—. B. S., '95; M. D., '97; one year's service as interne, St. Barnabas hospital; general practice in medicine for ten years; studied abroad in 1909-10; work mostly limited to internal medicine since 1910; research work along line of specialty; contributor to magazines and medical society, programs; interested in social settlement work; member board of directors Drummond Hall; member board of directors of the General Alumni Association since organization and one of the chief movers in putting the alumni association upon an efficient working basis; member Phi Beta Kappa, American, State and county medical associations, Minn. Academy of medicine; Baptist.

Regent for Life. By a special act of the State legislature, approved March 27, 1905, Honorable John S. Pillsbury was made regent for life, as a special token of respect and appreciation of his services to the University.

Regents. See Board of regents.

Regents of the University. For table showing membership and for portraits of members, see Forty Years of the University of Minnesota, pages 265-273.

Regents Minutes Index. A card index of the minutes of the board of regents meetings is kept in the office of the president of the University.

Regents, Succession in Board. See pamphlet prepared by E. B. Johnson, registrar, in 1901.

Reid, Harry M., instructor in prosthetic dentistry, 1896 to 1909.

Relf, Frances H., assistant in history in charge of historical laboratories, 1912-13.

Religious Statistics. The most complete and reliable religious statistics of the University were gathered in 1912-13 under the direction of the religious work director. A short summary of the main facts gathered appears in the Minnesota Alumni Weekly of January 27, 1913.

Religious Work Director. Many times during the past ten years plans have been discussed for the organization of religious work at the University upon a broader and more effective basis. The leading church bodies of the state have discussed plans but could agree upon no plan for concerted action. The International committee of the Young Men's Christian Association selected Minnesota, early in 1909, as a field peculiarly fitted to try out an experiment in religious work in colleges. A Mr. Carter and a Miss Wilbur representing the committee, came to Minnesota to work with the representatives of the University Young Men's and Young Women's Christian Associations. The co-operation of men and women of various denominations was enlisted and pledges sufficient to provide the salary of a religious work director were secured.

The Reverend Willard S. Richardson of New York, was called to the University to "make" the position as well as to fill it. Mr. Richardson spent the years 1909-12 at the University. While the result was not all that had been hoped, Mr. Richardson's work indicated that the work was worth while. Mr. Richardson felt that he was not specially fitted to make the most of the opportunity afforded in this field,

Mayo M. M. Williams [BOARD OF REGENTS] J. G. Williams Schultz
Vincent Lind Eberhart
Butler Somners Rice Snyder Nelson

and left the field open to a new man. After full consideration of the whole situation, Reverend John Walker Powell, '93, of Duluth, was called to the work on a three-year agreement. Mr. Powell took up his work in the fall of 1912 and spent the following year making a study of the problem. As a result of his year's work Mr. Powell has arrived at certain very definite conclusions which are embodied in an article which appeared in the Minnesota Alumni Weekly of May 26, 1913.

Re-organization of the School of Medicine. A complete re-organization of the school of medicine took place when the regents, on February 17, 1913, adopted the report of a special committee on re-organization of medical instruction. A full statement of the plan of re-organization will be found in the appendix to the minutes of the board of regents of that date.

Research and Publication. The legislature of 1911 made an annual appropriation of $10,000 which was renewed by the legislature of 1913 for the purpose of encouraging research work at the University and to provide for the expense of the publication of the results. During the first year following this appropriation the following research work and publications were undertaken:

(1) Over forty investigations, on a wide range of subjects, have received aid in the form of material, apparatus and assistants.

Abbreviated titles of some of the researches—More efficient ventilation, Mental examination of children, Contagious abortion in cattle, Tubercle bacillus, Cirrhosis of liver, Scandinavian settlements in the United States, Commission form of government, Plant lice, Radioactivity, Nebulae, Edition of York plays, Cerebral cortex, Blood, Embryonic growth and development, Industries in the Northwest, Telephony, Metering electric power, Implantation of ovum, Electric discharge, Reinforced concrete tests, Gyrostatic stability, Alkaloids, Ethnological survey, Inflammatory processes, Serum reactions, Editions of Beowulf and Nicholas notes, Enrichment of ore deposits.

(2) Botanical Survey: Plants of bogs of Northern Minnesota, studied with reference to reclamation and to relations of acid in soil to plants. Detailed vegetation survey, with utilitarian objects, made in four townships in different parts of State.

(3) Publications of Survey—Minnesota Trees and Shrubs, 325 pages; Guide to Autumn Flowers of Minnesota, 50 pages. Minnesota Botanical Studies, about 350 pages.

(4) Minnesota research publications: Some twelve monographs ranging from 40 to 250 pages each are being published, the subjects being in the fields of medicine, history, chemistry and agriculture.

Retzer, Dr. Robert, assistant professor of anatomy, 1909-11.

Reynolds, George Westfall, instructor in crown and bridge work, 1912-13.

Reynolds, Myron Herbert. Born November 5, 1865, Wheaton, Ill.; American ancestry; m. May I. Shaw; two sons and two daughters; professor of veterinary medicine and chief of the veterinary division since 1893; B. S. A., Iowa, '86; D. V. M., '89; M. D., Iowa college of physicians and surgeons, '91 Ph. G., Iowa college of pharmacy, '91;; private practice work in bacteriology, Michigan agricultural college under Marshall; has paid special attention to ventilation, tuberculosis and hog cholera; publications, Veterinary studies for agricultural students, microbiology, bovine tuberculosis, ventilation, haemorrhagic septicaemia, hypodermic cathartics, dissemination of tuberculosis by the manure of infected cattle, hog cholera and hog cholera vaccine, azoturia, hog cholera serum, infectious abortion, and a considerable number of public addresses that have been reprinted; organized state live stock sanitary board control work; helped to organize stallion registration board; member and secretary International commission on control of bovine tuberculosis, chairman committee on fundamentals of good state live stock sanitary control work for the U. S. live stock sanitary association, chairman committee on inspection of veterinary colleges for the American veterinary medical association; member Am. veterinary medical association, Am. Medical association, State veterinary association, State medical as sociation, U. S. Live stock sanitary association, Missouri valley veterinary medical association; Congregationalist.

Rhame, Mitchell D., instructor in civil engineering and industrial drawing, 1872-73; assistant professor, 1873-74, professor, 1874-80.

Rhodes, John E., special lecturer of lumbering, 1912.

Rhodes Scholars. The following named graduates of the University have been Rhodes' scholars: Henry S. Mitchell, '05, Law, '09, 1905-08; Lucius Arnold Frye, '07, M. A., '08, 1908-11; Henry Van Anda, Bruchholz, '11, 1913-1916.

Rice, A. E., Willmar. Appointed regent May 7, 1897, reappointed in 1903; reappointed in 1909; term expires in 1915. Born in Norway, September 24, 1847. Member of Co. K. 15th Wisconsin volunteer infantry, during the Civil war. Entered the banking business in 1882; president of the bank of Wilmar; vice-president of the Wilmar Sash and door company; member of the Minnesota house of representatives, from Hennepin county, 1870; member of senate, Kandiyohi county, 1874-86, except one term; lieutenant governor of Minnesota, 1886-91. President of the board of farmers' institutes.

Rice, Henry M., St. Paul. Regent 1851-59.

Rice, Maude Bessie, assistant in domestic art, 1912-13.

Richards, Ernest Thomson, clinical instructor in medicine, 1911-13; instructor in same, 1913-

Richards, Grace E., instructor in practice school, 1910-12.

Richards, William Henry, instructor in carpentry and pattern work, 1912 to date.

Richardson, A. J., instructor in English branches in the preparatory department of the University, 1867-69.

Richardson, Oscar K., lecturer (homeopathic) on life insurance examination, 1898-03. Assistant in clinical medicine, 1907 to 1909. Died December 10, 1909.

Ricker, George E., professor of clinical (homeopathetic) medicine, 1888-89; and physical diagnosis, 1889-05. A. B., Minn., 1874; Hahnemann (Phila.) medical college, 1878. Died September, 1905.

Riddle, William Halderman, instructor in mathematics, 1896-97. Killed in a street car collision January, 1897. See first edition.

Rider, Don DuVello, instructor in prosthetic technics, 1905-06.

Rifle Club. Organized January 10, 1911, and affiliated with the National Rifle Association of America. Its object is to encourage rifle shooting among the men of the University; 29 active and 93 associate members.

Riggs, Charles Eugene. Born in Williams County, O., April 26, 1853; son of Charles and Annie Northcraft Riggs; m. Mable Elizabeth Pratt; professor of mental and nervous diseases since the organization of the department of medicine in 1888; professor emeritus, 1913 to date; A. B., Ohio Wesleyan University, Delaware, Ohio, 1877; A. M., later; M. D., College of Physicians and Surgeons, Baltimore, Md., 1880; post graduate courses at New York, London, Edinburgh, Paris; engaged in the practice of medicine since 1881; member American Neurological Association, American Medico Psychological Association, American Medical association, etc.; Scottish Rite Mason, Shriner; member Minnesota and Town and County clubs, St. Paul, and Sewanhaka Corinthian Yacht club, New York; Congregationalist.

Riheldaffer, J. G., St. Paul. Regent, 1853-59.

Ringnell, Carl John. Born June 3, 1864, at Vissefjerda, Sweden; son of Peter P. and Ingrid Beata Ringnell; m. Carrie Morris Wilkins; one daughter; assistant in laryngology, 1894-95; attended Gustavus Adolphus College at St. Peter for three and one-half years; M. D., Minnesota, '91; has done graduate work at N. O. Polyclinic, '96; New York Polyclinic, '02; New York Postgraduate, '02; and attended clinics in Europe in '93; was deputy coroner in 1895 and 1896; was a member of the state board of medical examiners from 1900 and secretary of the board from 1901 to 1906; member Hennepin County, State and American Medical associations, Mason; afiliated with the English Lutheran church.

Ripley, G. C., lecturer on equity jurisprudence and procedure, 1888-89.

Ritchie, A. F., professor of anatomy, 1888-89. Died 1907.

Ritchie, Harry Parks. Born March 2, 1873, Wellington, Kansas; m. Elizabeth Winter; two sons and two daughters; assistant in gynecology, 1897-01; instructor gynecology to 1909; clinical instructor in surgery to 1912; assistant professor of surgery, 1912 to date; Ph. B. '93, Yale; M. D., Minn. '96; surgeon U. S. volunteers, 1898-00; sixteen years professional experience; member State and Ramsey Co. medical associations; Presbyterian.

Ritchie, Parks. Born December 15. 1845, Bainbridge, Ind. Graduate of Franklin academy, Franklin, Ind. Ohio medical college, M. D., 1870; practiced medicine at Petersburg, Ind., removed to Wellington, Kansas, 1871-73; returned to Indiana and practiced eight years at Martinsville; graduate work at the College of physicians and surgeons, New York, and Bellevue hospital college, 1880-81; practiced medicine in St. Paul since 1881. Professor of obstetrics from the organization of the college of medicine and surgery, 1888 to 1913. Dean of same college, 1897-06. Member of the medical and surgical staff of St. Luke's hospital; obstetrician of City and county hospitals, St. Paul; member of the American medical association; Minnesota state medical association; ex-president of same; Minnesota academy of medicine, ex-president of same; Ramsey county medical society; Obstetrical council of the international medical congress. Died February 2, 1913.

Robbins, L. H., student assistant in agriculture, 1911-12.

Roberts, Anne B., clerk, business office, 1911 to date.

Roberts, George F., professor (homeopathic) of diseases of women, 1895-04.

Roberts, Thomas S., professor of diseases of children, 1900—; clinical professor pediatrics to 1913; professor emeritus to date.

Roberts, William B., lecturer (homeopathic) on general surgery, 1903-04; professor general surgery, 1904 to 1909.

Robertson, D. A., professor of agriculture, 1869. Died March 16, 1905, at the family residence, in the city of Minneapolis, in his 83d year.

Robertson, Harold E., assistant professor of pathology and bacteriology, 1909-10; associate professor and director of the joint laboratories of the University hospital and out patient department to 1913; acting director of pathological, public health and bacteriological laboratories, 1913-

Robertson, William, instructor in physics and language work, school of agriculture, 1892-05; superintendent of the substation at Crookston, 1905-06; also principal of the Crookston agricultural school, 1906 to date of his death, January 11, 1910.

Robertson, Mrs. William, registrar and librarian, Crookston school of agriculture, 1906-1911.

Robinson, Edward Van Dyke. Born December 20, 1867, Bloomington, Ill.; son of Charles Stanley and Wilhelmina von Schwanenflugel Robinson; m. Clare Howard; one daughter; professor of economics, 1907 to date; A. B. Mich. '90; A. M., same '91; Ph. D., Leipzig; principal St. Paul high school; acting professor of economics and politics, Albion college; lecturer in commercial geography, Chicago; practical experience in railway offices; research work—War and economics in history and in theory, nature of the federal state, division of governmental power in ancient Greece. The wealth of Minnesota, Changes in Minnesota agriculture indicated by the XIII census, Reciprocity and the farmer, Railroad taxation in Minnesota. The cost of government in Minnesota, Statistical study in the agricultural development of Minnesota; publications, The Caroline Islands and the terms of peace, West Indian and Pacific islands in relation to the Isthmian canal, Crete and the Cretan question. The control of the Isthmian canal, The panic of 1907, Reorganization of the grades and the high school, Economic geopraphy—what it is, Text book of commercial geography, also various articles and reviews, chiefly in the American Economic review, Quarterly Journal of economics, political science quarterly, school review, and journal of geography; contributing editor of the weltwirthschaftliches Archiv, Revue Cartographique de Geographie Economique and journal of geography; chairman standing committee on commercial subjects, North central association of colleges and secondary schools; member board of directors of the national tariff commission association; di-

rector department of research and statistics, Minnesota tax commission; American economic association, society of American geographers; Episcopalian.

Robinson, L. Sydney B. Born July 17, 1873, Mendota, Ill.; New England ancestry; descendant of John Robinson, pastor of the Pilgrim; m. Esther Edith Jamieson; clinical assistant in obstetrics, 1911-12; clinical instructor, 1912-13; Harvard, A. B. (Magna cum Laude), '97; M. D. (cum Laude), Harvard medical school, '01; a year's experience as druggist; two years house officer Boston City hospital; private practice eight years; member county, state and American medical associations.

Rodda, Frederick C., assistant in pediatrics, 1913-

Rodgers, Charles LeRoy, clinical assistant in obstetrics—, 1912-13; assistant in obstetrics, 1913-

Roe, Harry .Burgess. Born Afton, Minn.; New England ancestry; m. Isabel Davis Parker; two sons and two daughters; instructor in mathematics, 1908-09; assistant agricultural engineer, 1909-11; assistant professor, 1912 to date; B. S. in engineering, 1899; 10 years' work as construction engineer with the railways of the northwest; Christian scientist.

Rogers, C. H., instructor in pharmacology, 1913.

Rogers, John T., clinical instructor in diseases of children, 1895-98; clinical instructor in surgery, 1898-02; clinical professor of surgery, 1902 to 1913; assistant professor of same 1913-.

Roll, William A., born August 2, 1887, Danvers, Minn., German ancestry; instructor in crown and bridge work, 1912-13; D. D. S. '11; general practice since that date; member State and Minneapolis dental socities; Roman Catholic.

Rollin E. Cutts Prize in Surgery, The. Dr. Mary E. Smith Cutts, Med. '91, has given the University, as a memorial of her husband, Dr. Rollin E. Cutts, Med. '91, the sum of $500.00, the income from which is to be awarded in the form of a gold medal to that member of the senior class of the college of medicine and surgery who presents the best thesis showing original work upon a surgical subject.

Rome, Robert Rasmussen. Born March 4, 1865, Denmark. University academy, Chicago; Denison University, Granville, Ohio. One year at Rush, 1883; Hahnemann college, Chicago, 1891; University, M. D., 1892. Supplied the pulpit of the Albert Lea Baptist church, 1889. Adjunct professor, in charge of clinical obstetrics, college of homeopathic medicine and surgery, 1894-96; clinical professor of obstetrics, 1896-02; professor of diseases of women, 1902-03; senior professor of gynecology, 1903 to 1909; author of many articles for medical and surgical journals; inventor of an instrument for measuring the internal conjuge of living women to ascertain if childbirth is possible. Died in 1912.

Roop, W. P., instructor in physics 1911-12.

Rose, Bert A., born August 18, 1866, St. Paul, Minn.; graduate of high school; music teacher for twenty years; band master, university, since 1897.

Rose, Norman W., instructor in drawing, 1906-09.

Rose, Raymond, laboratory and field assistant in plant pathology, 1913.

Rosendahl, Carl Otto. Born October 24, 1875, Spring Grove, Minn. Attended country schools; Decorah, Ia., institute, 1896; B. S., University, 1901; M. S., 1902; Ph. D., Berlin, 1905, after two years of graduate work at that institution. Taught one year in country school. Scholar in botany, 1900-01; instructor, same, 1901-02; assistant professor, same, 1905 to 1909; professor of same to date. Author of Contributions to Flora of Southeastern Minnesota; Die Nordamerikanischen Saxifragineen und ihre Verwandtschaftsverhaltnisse in Beziehung zu ihrer Geographischen Verbreitung (doctor's thesis); Observation on Plant Distribution in Renfrew District of Vancouver Island.

Rost, C. O., instructor in soils, 1913.

Rothrock, John L., clinical instructor in pathology, 1898-03; and gynecology, 1903-05; clinical professor of diseases of women, 1905 to 1913; assistant professor gynecology 1913-. Lowry Arcade, St. Paul.

Rothschild, Maurice L. and Company Prize. Maurice L. Rothschild and Company provided three cash prizes of fifty, thirty, and twenty dollars each, which was annually awarded to those three students in the freshman and sophomore classes who wrote and delivered the best orations. These prizes were established in 1909 and discontinued in 1913.

Rotzel, C. L., associate professor of accounting, extension division of economics, 1913.

Rowe, Bessie, extension work in home economics, 1911-13.

Rowley, Edith, scholar in German, 1910-11.

Rowley, Frank Benjamin, born Evansville, Wis.; m. Edith Pauline Kuhlmeyer; one daughter; instructor in drawing and descriptive geometry, 1907 to date; B. S. in mechanical engineering, 1905; M. E. '06; professional experience in designing gas apparatus, 1906-07; member Sigma Xi, junior member Am. Soc. of mechanical engineers, S. P. E. E.

Rudolph, Charles Eugene, instructor in prosthetic dentistry, 1912-13.

Ruggles, Arthur Gordon. Born May 30, 1875, Annapolis Royal, N. S. Normal school and agricultural college, Truro, N.

S.; B. S. A., Cornell; M. S., same. Taught four years in public schools of Nova Scotia. Instructor in entomology and zoology, school of agriculture, and experiment station, 1904-'08; assistant professor entomology to date.

Russell, Bert., instructor in chemistry, 1902-03.

Russell, H. L., instructor in bacteria in dairy products, 1903 to 1911.

Ryan, Gussie K., pay roll clerk, 1907 to date.

Ryan, "Mike"—"College cop" for thirty-one years. Mr. Ryan began his service on the police force at almost the same time the University opened its doors and was on the University beat for practically all of the time of his service on the force. It is said that during his long term of service he never arrested a University boy and this does not mean that he did not do his duty as an officer. When he thought things going too far he would appeal to the students for an abatement of the disorder, and, so thoroughly was he liked, that he never appealed in vain. One time he told an unruly group of students—"Bys, ye must disperse or I'll lose me job" and they dispersed quietly.

Thousands of alumni remember "Mike" and cherish of him the kindest memories.

Mr. Ryan was born in Limerick, Ireland, in 1840. He came to America in 1856. He served in the regular army of the United States and as a volunteer in the Civil War. He died August 8th, 1913.

Ryan, William Thomas, born February 28, 1882, at Joice, Iowa; American ancestry; m. Ella Ryan; instructor in electrical engineering, 1906-09; assistant professor since 1909; E. E., Minnesota, '05; two years as engineer for the Westinghouse Electric Co., and some testing and consulting work since that date; research work on the Transmission line calculations, has published numerous technical articles and three books, Volumes 1, 2, and 3, on Design on Electrical Machinery; member of Sigma Xi, Tau Beta Pi, Am. Institute of Electrical engineers, chairman Minnesota section, 1913; society for promotion of engineering education, Alpha Kappa Sigma; Catholic.

Salary Schedule Study. In the spring and summer of 1910, E. B. Johnson, then clerk of the president of the board of regents, acting under the direction of the salary committee of the board of regents, made a study and reported upon a salary schedule for the University. This schedule in its final form was printed and submitted to the regents early in the fall of that same year. The report was based upon a very wide study of the question and consultation with the leading authorities of the country.

Salt Spring Lands. In 1857 the United States ceded to Minnesota 46,080 acres of so-called salt spring lands and later, in 1879, the United States added 24 sections, 15,360 acres, to supplement the first grant, making a total of 61,440 acres granted by the government to the state. This supplementary grant was given because of the fact that this amount of land had been lost to the University on account of previous selections, partly through locating selections on lands belonging to the Indians and partly because settlers had taken up under the homestead laws land selected. The grant of 1879 was secured through the good offices of Governor Pillsbury who secured the passage by the state legislature of a resolution asking Congress to make good this loss. The state selected and received title from the United States to 29,842.77 acres from the first grant and 15,087.83 acres from the second grant, a total of 44,930.6 acres. 7,643.8 acres were voted by the legislature to the Belle Plains Salt company to encourage the investigations of the company into the possibility of using the lands for the production of salt. Nothing was accomplished through this grant, the company selling the land and doing almost no work in return. A second grant was asked by the same company and the legislature called in Professor Winchell, of the University of Michigan, to investigate and report. His report indicated that nothing was to be hoped from the company and in 1872 an act was passed creating the Geological and Natural History Survey and granting to that survey for its support all the lands remaining of the Congressional grant of 1857. Owing to an error 22.89 acres of land have been lost so that the state actually received 37,263.91 acres to be used for the support of the Geological and Natural History Survey and there is still due from the U. S. government 1,149.4 acres of land and an effort is being made to secure this land for the state. All but 4,625.64 acres of these lands have been sold and a total of more than $325,000 has been received for the support of the Geological and Natural History Survey.

Salutatorians. 1876, W. E. Leonard; 1877, E. A. Currie; 1878, Mary W. Robinson; 1879; George H. Partridge; 1880, G. W. Smith; 1881, Margaret Campbell; 1882, A. F. Hilyer; 1883, William E. Fay; 1884, Emma Zwinggi; 1885, Mary I. Irving; 1886, Ada L. Kiehle; 1887, N. M. Cross; 1888, Alice A. Adams; 1889, W. B. Ladue, 91.35; 1890, Milton Rex, 92.66; 1891, T. G. Soares, 94.76; 1892, Clara E. Bailey, 94.55; 1893, A. C. Knudson, 96.34; 1894, Theodore Clark, 94.05; 1895, Clarence B. Miller, 94.43; 1896, J. N. Berg, 92.05; 1897, Helen C. Woodman, 94.22; 1898, Annabel W. Beach, 95.71; for the following years the honor of "salutatory" was not awarded but the persons named were granted second honors in scholarship—1899, B. S. Nickerson, 94.49; 1900, Allen R. Benham, 95.12; 1901,

Harry C. Libby, ——; 1902, Katherine Jacobson, ——.

Salutatory. See Valedictory.

Sanborn, Helen Atherton, assistant in biology 1911 to date.

Sandberg, G. A., assistant purchasing agent, 1911 to date.

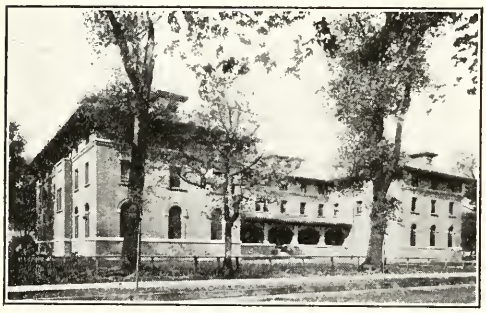
Sanders, Henry A., instructor in Latin, 1897-99. See first edition.

Sanderson, James Cox, instructor in physics 1911 to date.

Sandholt, Henry, assistant in dairy school 1904-05.

Sanford, Edward Patterson, born July 29, 1877, Philadelphia, Pa. Grade and high schools of Philadelphia; B. A., 1900; M. A., 1902; LL. B., '05. Instructor in rhetoric, 1900-01; assistant professor 1905-06.

Sanford Hall. The University opened in November 1910, a dormitory for the accommodation of a part of the women students. In honor of Maria L. Sanford, Emeritus Professor of Rhetoric, this dormi-



tory is named Sanford Hall. It is situated on the corner of Eleventh and University Avenues, southeast. It furnishes a home for ninety girls, about one-half of whom may be freshmen. The charge for room and board is $225 for the University year.

Sanford, Mary F., 1902. General secretary of the University Y. W. C. A., 1903-05; now Mrs. W. R. Morison.

Sanford, Maria L., born December 19, 1836, Saybrook, Conn. She spent her girlhood in Meriden, Conn. Connecticut state normal school, 1855; ten years she taught in the schools of Connecticut—five in New Haven. She then went to Coatesville, Pa., where she was superintendent of the schools, and principal of the high school. Resigning there she accepted the position of teacher, and was afterwards made professor of history, elocution and rhetoric in Swarthmore college. Here she taught for ten years. While at Swarthmore she lectured extensively in Ohio, Pennsylvania and Maryland.

In the fall of 1880 she came to the University as assistant professor of rhetoric and elocution, 1880-81; professor of same, 1881 to 1909; professor emeritus to date. Professor Sanford has always taken a deep interest in the various works of a charitable and religious nature. She has been a director of the Northwestern hospital, and president of the Woman's auxiliary to the Young Women's Christian association. In temperance work her influence is felt throughout the state. As an eloquent, forcible, popular and earnest speaker, Miss Sanford is well known to the people of Minnesota, having given numerous addresses in practically every part of the state. She was recently introduced to an audience as the "best known and best loved woman in the state of Minnesota." She is actively connected with various women's organizations and takes an active interest in everything that promises civic betterment. See Weekly, June, 1909 and Dec. 18, 1911.

Scholarship, Sanford, Maria L. The Minnesota Federation of Women's clubs have raised $1,200 for the purpose of endowing a scholarship in the University to be known as the Maria L. Sanford scholarship. The money is loaned to senior women in sums not to exceed $250 each, to be repaid within two years after graduation, with interest at the rate of four per cent.

Santo, Julius Henry, instructor in mechanics and mathematics 12-13.

Sardeson, Frederick W., born February 22, 1866, Wiota, Wis.; son of Joseph and Petra Rossing Sardeson; B. L. '91; M. S. '92; Ph. D., Univ. of Freiburg, '95; m. Edna A. Mitchell; one daughter; instructor of palaeontology 1892-4, 1898-1905; assistant professor since 1905; on U. S. Geol. survey 1889-91; Baden Geol. survey 1894-5; geologist Great Western railway 1896-7; field assistant U. S. Geol. survey 1907-11; research work along the line of his specialty, palaeontology; has published some thirty articles and reports on this line; member Phi Beta Kappa and Sigma Xi; fellow Geol. Soc. America and A. A. A. S., Congregationalist.

Sargent, F. H., instructor in Crookston school of agriculture 1911 to date.

S. A. U. M. Established in 1899. A society of young men and women, of the school of agriculture, who have banded themselves together for the purpose of securing literary training.

Savage, Charles Albert, born in Stockbridge, Mass.; son of Albert Buckley and Sarah Adams Savage; m. Clara Blanche Hull; one son; instructor in Latin 1899-03; assistant professor of Latin 1903-04; assistant professor of Latin and Greek 1904-09; professor of Greek 1909 to date; three years at the University of Minnesota; A. B. '95, Johns Hopkins; Ph. D., same, '03; several years experience in grain and insurance business; research work in the sphere of Greek private life; has published, The Athenian in his relation to the

state, Studies in honor of B. L. Gildersleve, The Athenian family; has given public lectures on subjects connected with Greek literature, life and art; member classical association of middle west and south, secretary Minneapolis branch of Archaeological institute of America.

Sawyer, John E. Professor (homeopathic) of the history and methodology of medicine, 1894-95.

Sawyer, Wesley G. Assistant professor of German, 1873-74.

Scabbard and Blade (Co. B. of the National Society) this society was established at Wisconsin in 1905-06. Its membership includes cadet officers above the rank of second lieutenant, in class "B" military schools. Its purpose is to bring together men especially interested and proficient in military science. Its activities vary, having always in mind things which tend to further the interest of the Cadet Corps. Class "B" schools are schools where uniforms are not worn all the time. Membership in the society is elective. The society is purely honorary.

Scammon, Richard E., born July 9, 1883, Kansas City, Mo.; assistant professor of anatomy, 1911-1913; associate professor to date; A. B., Kansas, '04; A. M., '06; Ph. D. Harvard, '09; assistant in zoology, Kansas, '05-06; assistant instructor, 1906-07; Austin teaching fellow histology and embryology, Harvard medical school, 1907-09; instructor, 1909-10; assistant professor of anatomy, Kansas, 1910-13; research work in vertebrate embryology; Unionidae of Kansas; embryology of Squalus acanthias; member Asso. Anat.

Scandinavian Society. This organization, under various names, has been in existence since the days when Professor Breda came to the University in 1884. At times it has been inactive, but during the past five years, since the coming of Professors Bothne and Stomberg, it has been revived. The purpose of the society is to bring together for mutual enjoyment and profit, the men and women of Scandinavian birth, or descent, in the University. Programs in Scandinavian are given and a definite attempt is made to arouse and keep alive an interest in the best things in Scandinavian language, literature, art and life. Frequent meetings are held—social and literary, and some of the great men of the Scandinavian countries are secured to give lectures upon their specialties. The society has a large and enthusiastic membership.

Schadle, Jacob E. Clinical instructor in diseases of nose and throat, 1895-98; clinical professor, same, 1898-03; clinical professor laryngology, rhinology and otology, 1903-04; of rhinology and laryngology, 1904 to 1908, May 29th, the date of his death.

Schandell, A. G., assistant in dairy school 1909-10.

Schaper, William A., born April 17, 1869, LaCrosse, Wis.; German ancestry; m. Harriet McKowen; instructor in political science, 1901-02; assistant professor, 1902-04; professor 1904 to date; B. L., Wisconsin, '95; M. A., Columbia, '98; Ph. D., same, '01; studied at University of Berlin 1900-01; holder of scholarship and fellowship, Columbia, 1896-98; principal of high school Alma, Wis., 1891-93; instructor in history, economics and political science Dubuque high school 1898-00; experience as clerk in bureau of the census 1890; research work in field of sectionalism and representation in South Carolina for which he was awarded the Justin Winsor prize by the American historical association for "the best monograph based on original research submitted" in 1900; publications based upon educational topics connected with his specialty, especially city charters with special reference to Minnesota; numerous reviews in political science publications and the report of the committee of five of the American political science association on instruction in government in secondary schools; Six o'clock club, Commercial club, Civic and commerce association, American political science association, American economic association, National municipal league; Universalist.

Schefick, J. Francis. Instructor in materia medica, college of dentistry, 1905 to 1912.

Schinz, Albert. Instructor in French, 1898-99. See 1st edition.

Schlenker, Carl, born June 8, 1869, Wilkesbarre, Pa. A. B., Michigan, 1892; University of Iowa, 1896-98; Berlin, 1900; Berlin, Munich, 1912-1913. Professor of English and modern languages, Carthage college, 1892-96; instructor in German, Iowa University, 1896-98; instructor in German, university, 1898-00; assistant professor of German, 1900-05; professor same, 1905 to date. Editor of Collegian, 1892-96; contributor to various periodicals and daily press on subjects dealing with the drama; Germelshausen, in collaboration with Professors Potter and Peck; editor of Deutsche Gedichte. Editor Schiller's Wilhelm Tell.

Schlutz, Frederic William, born November 10, 1880, Greene, Iowa; German-French ancestry; m. Emma Margaret Handke; one daughter; instructor in pediatrics, 1911, to date; temporary instructor in physiology chemistry; Maryland university, '02; Berlin and Strassburg, 1909-10; A. B., M. D.; general practice of medicine six years, specializing in pediatrics since 1910; publications: Fraction of Amino Acids in Infant's Urine; Toxicity of Camphor for Infant Organism; Pyrogenic Action of Lactose; director of infant welfare work of Minneapolis; mem-

ber American society for experimental medicine and biology, Chicago Pediatric society, American and State Medical association, Minn. Pathol. and Pediatric society, Sigma Xi, Phi Sigma Kappa, Nu Sigma Nu; Lutheran.

Schmidt, Gottfried. Dispensary assistant, 1901-.

Schneiderhan, A. C., instructor in German 1910-12.

Schoen, Ida. Instructor in German 1897-98.

Schoen, Marie. Instructor in German, 1892-96.

Schoen-Rene, Anna, in charge of University Choral Union 1894-97. See first edition.

Scholarships (Endowed and Current). The Moses Marston, The Albert Howard, The John A. Johnson, The Minneapolis Steel and Machinery Company, The College Woman's.

Scholarships (University). It is the policy of the University to encourage graduate study and to provide for assistance in laboratories, reading of test and examination papers, supervision of note books, and similar services by the appointment of assistants and scholars in departments where such services are required. The general principles which now control the making of such appointments are: (1) the appointments are made by the Board of Regents, upon the nomination of the head of the department concerned and its ratification by the dean of the college; (2) appointments are for one year only, but may be renewed; (3) the appointees must be graduate students who are taking work along the line of their appointments; (4) they are not regularly placed in charge of classes, and when exceptions are made to meet emergencies the arrangement is regarded as a temporary one.

School of Agriculture. The total attendance upon the regular courses in the school of agriculture, from 1888 down to 1913 was 4824 excluding duplicates.

School of Agriculture History. See paper by Professor Coates P. Bull, published in the Minnesota Alumni Weekly of April 21, 1913.

School of Design, Freehand Drawing and Woodcarving. See College of engineering.

School of Mines Building. Was erected in 1903 at a total cost of $61,000, the proceeds of two different appropriations. The building is designed to accommodate only the technical work of the school as adequate building accommodations have already been furnished for chemistry, geology, mineralogy, drawing and mechanical and electrical engineering. It is 150 feet long by 65 feet wide. It is a red brick building three stories high. The lower floor is occupied by the assaying and metallurgical laboratories; the second floor contains offices, two large lecture rooms, departmental library and a museum; the third floor provides two quiz rooms, a large, well lighted draughting room, thesis room, a dark room and a blue print room.

The building was burned February 14th, 1913, the entire building except the walls being destroyed. The regents have voted to rebuild and remodel the building for the use of the college of education, with the expectation that, eventually, the building will be used for a model school. The legislature of 1913 appropriated $54,000 for this purpose.

School of Mines (new) building. The legislature of 1913 appropriated $145,000 for a new building for the school of mines. This building is to be located just north of, and facing the open space between the recently erected engineering buildings.

School of Mines Bulletin is published annually in April. It is devoted entirely to information concerning the alumni of the school of mines. A complete record of each alumnus is published from the time of graduation to the time of publication of the bulletin. The school of mines society issues this publication and sends it to every alumnus of the school.

School of Mines Society, The. This organization is maintained by the students of the school of mines for the purpose of promoting the interests of the students in mining topics. The society provides monthly lectures by its own members, prominent alumni of the school and others who can be obtained for the purpose. The society publishes an annual report containing a report of the year's work and up-to-date list of the alumni of the school.

School of Traction Engineering. This school was established in 1908 and provides instruction in traction engineering to prepare men for the operation and care of traction engines and similar machinery. The work is given each year beginning about the middle of May. Originally no entrance requirement was specified, but at the present time a year's experience with either a plowing or threshing outfit is required. 332 persons have completed the prescribed work of this course.

Schroedel, Theophilus Henry, born September 16, 1882, Ridgeville, Wis., German ancestry; instructor in German 1906 to 1908 and 1910 to date; B. A. Northwestern college, '02; graduate work at Lutheran seminary, Milwaukee, Wis., 1902-05; at Chicago, 1907-12, and at Heidelberg and Berlin, member of the American school of archaeology in Jerusalem, Palestine, as fellow of the University of Chicago, 1908-09; member Lambda Alpha Psi; Lutheran.

Schroeder, C., instructor in animal husbandry 1907-08.

Schulten, Jessie L. Assistant in rhetoric —— to 1908.

Schultz, C. G., St. Paul, regent ex-officio since 1908 when he was appointed state

superintendent of public instruction by Governor Johnson.

Schultz, Clifford Griffith, scholar in history 1911-12.

Schulz, Waldemar. Instructor in German, 1899-1904. See 1st edition.

Schumacher, Albert J. Instructor in civil engineering and physics, 1890-91.

Schurmeier Prize, The. For the best essay presented by an undergraduate student upon an assigned topic. This prize, $20, was established by the Honorable Theodore L. Schurmeier, of St. Paul, in 1899. The prize has been awarded as follows: in 1898, to Arthur A. McBride; in 1899, to E. F. McGinnis and W. D. Galvin, who tied for first place, was awarded one half the prize money each; in 1900, to Perl W. Mabey; in 1902, to George T. Webb; in 1903, to C. Youngquist; in 1904, to N. F. Soderberg.

Schurmeier, T. L. Regent of the University from 1902-1904. Appointed from St. Paul.

Schwartz, N. E., preceptor of boys' dormitory, Crookston school of agriculture, since 1910.

Schwartzkopf, Olaf. Professor of veterinary science and veterinarian of the experiment station, 1888-1892.

Science Club was organized 1910, it includes members of the faculty of the department of agriculture and others connected with the institution. Meetings are held on the first Monday evening of each month. The purpose of the club is to bring those connected with the agriculture college and station in closer touch with one another and with many lines of work carried on in the several divisions.

Science, Literature and the Arts, The College of. This college was provided in the charter of the University and was organized by the regents at the very beginning, along with the college of agriculture and mechanic arts. The work of this course extended from the grades to the completion of work for the bachelor's degree, and the revised plan adopted in July 1871, looked toward the providing of advanced work leading to corresponding advance degrees. The preparatory work was dropped off gradually, preparatory classes being discontinued in 1874, 1876 and the final preparatory class being dropped in 1890.

Admission to this college is based upon the completion of a full four-year high school course or its equivalent, with the grade passed with credit (or pass plus or good, according to the notation).

The college course embraces four years and leads to the degree of bachelor of arts. This college also gives the first three years of the Course in Arts and Medicine, leading to the degrees of B. A. and M. D., of the course in arts and dentistry, leading to the degrees of B. A. and D. D. S.; the first two years of the course in science and medicine, leading to the degrees of B. S. and M. D., of the course in education, leading to the degree of B. A. in education, and of the course in law, leading to the degree of bachelor of laws.

As originally organized this college provided courses in the classics, in science and literature and the degrees granted were bachelor of arts, science, or literature. In 1899, provision was made for offering work in a so-called civic course, leading to the degree bachelor of philosophy and one class, of ten members, was graduated in 1901. Beginning with the year 1901-02, all distinction in courses was abolished and the course was made more largely elective and all completing the course were given the degree bachelor of arts.

Until the beginning of the year, 1893-94, the work of the junior and senior years was not wholly elective, though from the very beginning some provision has been made for elective work in these two years, the amount being gradually increased until the year 1893-94, when all of the work of these two years was made entirely elective. The work of the freshman and sophomore years was, however, outlined with rare chances to secure options up to about the middle of the nineties, when the elective system, hedged in by more or less stringent regulations, had become fairly well established as a principle. From that time on until the opening of the year 1904 when the work of these years was made practically elective, the principle made progress and finally resulted in the work of the whole course being made elective, with but few restrictions.

The chief restrictions of the curriculum which went into operation the present year (1913-14) are the following:

1. The student must complete a major subject, consisting of 24 credits in one department, and two minor subjects, consisting of 12 credits in each of two departments.

2. He must so seclect his subjects in the freshman and sophomore years as to represent each of the three groups in language, science and the humanities.

3. He must secure in the junior and senior years 36 credits in so-called starred courses, a starred course being an advanced course, open only to juniors, seniors, and graduates.

4. He must secure an average of good in half his subjects.

This college has fifty-one professors, seven associate professors and thirty-seven assistant professor, fifty-nine instructors and a large number of scholars and assistants. A large portion of the work of this college, was formerly carried on in the old main and is now housed in Folwell Hall. Pillsbury Hall, the Chemical laboratory building, the Library building and the Physical Laboratory building, also help to house the college. This college did not have a dean until the year 1903-04. The affairs of the college are governed, as in

the case of other colleges, by the faculty, subject in all matters of unusual importance to the action of the board of regents.

The tuition charged in this college is $30 a year and double this sum for non-residents. See also report of Dean in The President's Report for 1911-12.

Scott, Carlyle McRoberts, born December 1st, 1873, Lawrence, Mass. High school work in Massachusetts; one year in University of Leipzig; two years in Conservatory of Music, Leipzig; two years with private teachers in Leipzig. Taught one year in Leipzig and in Minneapolis since 1901. Assistant professor of music, in charge of the department 1904-1908; professor to date.

Scott, Frederick H., born February 19, 1876 at Toronto, Can.; assistant professor of physiology 1908-13; associate professor of same 1913; A. B., Toronto, '97; Ph. D. '00; M. B. '04; MacKinnon student, Royal Soc. London, 1906-07; Sc. D., London, 1908; demonstrator physiology, Toronto, 1900-04; Sharpey student and assistant University College, London, 1907-08; research work in microchemistry; chemistry of phosphorus bodies, respiration and nervous activity; phosphorus compounds of tissues and their metabolism; member of M. A. A., Physiol Soc., Soc. Biol. Chem., London Physiol. Soc.

Sears, Minnie E., head cataloger, 1909 to date.

Sedgwick, Julius Parker, born Wrightstown, Wis., May 27, 1876; American ancestry; m. Emily Weeks; two daughters and two sons; instructor in physiology; assistant professor of physiological chemistry; assistant research professor of physiological chemistry; clinical assistant in diseases of children; clinical instructor in diseases of children 1909 to 1913; associate professor in charge of the division of pediatrics 1913 to date; B. S., Nebr., '06; M. D., Rush, '99; University of Berlin 1904-05; Alexian Bros, hospital, Chicago, 1899-1900; interne at the Presbyterian hospital, Chicago 1900-01; assistant physician at the Fabiola hospital, Eveleth, Minn., 1901-04; general practice of pediatrics since 1905; publications, numerous articles in professional magazines relating to his specialty; attending pediatrist to the Minneapolis city, Asbury, Northwestern and Abbott hospitals; member of the milk commission of the Hennepin county medical society; vice-president of the Minneapolis infant welfare society; ex-secretary of the section on diseases of children of the American medical association; member of the leaflet and booklet committee of the Am. Association for the study and prevention of infant mortality; delegate to the English conference on infant mortality, London, member American, Hennepin Co., and state medical associations, Minneapolis civic and commerce association, Minneapolis club, commercial club, automobile club, campus club, University club, Minikahda club, Phi Kappa Psi, Nu Sigma Nu, Sigma Xi, Theta Nu Epsilon, Chicago pediatric society, Association of the American teachers in the diseases of children, Minn. pathological society, Am. academy of medicine, American school hygiene association and of the fourth international congress on school hygiene.

Seed Testing Laboratory. Since 1909 the department of botany and plant pathology, of the college of agriculture and experiment station, has been conducting seed tests and doing what it could to induce the people of the state to test all seeds before planting the same. The legislature of 1913 passed an act requiring that all seed sold in Minnesota should bear a certificate showing the result of such test. The act appropriated $5,000 annually to support a laboratory to make such tests and placed the administration of the law in the hands of the Minnesota Agricultural Experiment Station.

The law went into effect July 1st, 1913, and the work has been organized and placed in the hands of the department of plant pathology, the actual work being under the direct supervision of Professor W. L. Oswald.

The work of the department is directed to the following ends:—First—Agents will inspect seed sold in the state; second—Free purity and germination tests of seeds will be made for residents of the state; third—Short courses will be offered from time to time so that anyone can learn the correct methods of seed testing; fourth—Experimental work will be done along the line of seed testing; Fifth—General bulletins will be published from time to time; Sixth— The laboratory, through educational methods, will endeavor to improve the seed trade of Minnesota.

Seitz, Conrad, cashier, business office, 1912 to date.

Self-supporting Students. Students of the University, to a very large degree, are either partially or wholly self-supporting. The location of the University in the Twin Cities makes it possible for a large number of students to do this. The kinds of employment secured by students to help pay their own way, is limited only by the kinds of work available in a large city. Everything that anyone can do is attempted by the students. Students who have learned a trade before coming to the University find it a comparatively easy matter to earn a large proportion of their expenses while attending the University. For a fuller statement of this matter, see bulle-

tin, published in 1899, containing five papers written by students who made their way through the University. See also expenses of students, in this dictionary.

Selvig, Conrad G., was born at Rushford, Minn., October 11, 1877, of Scandinavian parents; graduate from the University College of Education, 1907, and took his master's degree the following year. Mr. Selvig had had considerable experience in school work before coming to the University. In 1910 he was chosen to take charge of the Northwest (Crookston) school of agriculture and experiment station and has been in charge since that date.

Sem. Bot., organized in 1886 at the University of Nebraska, has established an allied convocation at the University of Minnesota. It is essentially a research society in botany, composed of the botanical staff and of advanced students in the department. It meets alternately in convocation and in chapter to present the results of investigation, and for discussion.

Senate of the University. The Senate of the University was created by act of the Board of Regents adopted May 6, 1912. The Senate succeeded the University Council which had been in existence for a number of years previous. The membership of the Senate includes the President, who has suspensive veto over any action of the Senate, the deans who act as advisers to the President, the librarian, the president and professors emeriti, and all professors and associate professors. The registrar is clerk of the Senate and custodian of its records. The Senate has both legislative and administrative authority over all matters concerning the University as a whole. See minutes of the Board of Regents of May 6, 1912 for constitution.

Senior Adviser System. In the spring of 1913, the faculty, on recommendation of the academic student council of the University, adopted a Senior Adviser System, by which members of the senior class, chosen at the close of the junior year, will be assigned a definite number of incoming freshmen with whom the adviser is expected to keep in close touch during their first year in college. The adviser is required to report to the committee on student work twice a month, offering any suggestions that may appear to him to be desirable. He is expected to know the students in his group, their habits, conditions of living, scholastic preparation and all the environments that affect their life as students of the University.

Senior Annual (Northwestern School of Agriculture). Founded by the senior class of 1913. This is an annual published by the senior students in the school of agriculture at Crookston, Minn., and occupies the same relative position in the life of the student body of that school as does the Agrarian in the school of agriculture at St. Anthony Park.

Senior Engineer's Society. Organized in 1906 for the purpose of bringing its members into closer union and co-operation and to strengthen the bonds of friendship among its members. It was not until the spring of 1907, however, that the idea of making it a permanent organization was brought up and steps taken to carry it out. It is not the intention of the founders that it should become an exclusive society, but rather a nucleus of representative men about which the college life of the whole senior class may center.

Senior Promenade, The. An annual ball given by the senior class during commencement week. The custom was inaugurated by the class of 1888 and the first promenade was given in the old Coliseum in commencement week of 1888.

Senkler, Albert E. Professor theory and practice of medicine, 1888-91; professor of clinical medicine 1894-98 the date of his death.

Senkler, George E. Clinical instructor in physical diagnosis, 1897-04; clinical instructor in medicine, 1904-06; clinical professor of medicine 1906 to 1913.

Sewall, Dorothy. Clerk, department of agriculture, October 1911 to September 1913; pay roll clerk since that date.

Sewall, Harriet, librarian of the school of agriculture 1912 to date.

Sewall, Hannah R. Assistant in political science and chemistry, 1892-93; rhetoric instead of chemistry, 1893-95; assistant in political science, 1895-1902.

Sewall, T. H., instructor in Crookston school of agriculture 1911 to date.

Shakopean, The. A literary society limited to a membership of thirty-five men, who have as their object of existence the securing of culture in debate and oratory. Established February 15, 1893. See Gopher 1909, page 64.

Sham Battle with St. Thomas. The practice of holding Sham battles with St. Thomas college began on Inspection day May, 1910. Minnesota won the decision of the judges in this first battle. The second battle which was held the following year went to St. Thomas. The third, held in May 1912, was given to Minnesota by a unanimous decision of the judges. The plans for a battle for 1913 were made but had to be given up on account of a conflict of schedule at St. Thomas.

Shattuck, Helen M., head cataloger from 1907 to 1909.

Shaw, John M. Lecturer on evidence, 1888-89.

Shaw, Thomas. Professor of animal husbandry, and in charge of animal husbandry in the experimental station, 1893-1901; lecturer on live stock, school of agriculture, 1901-04.

Sheffer, Henry M., instructor in philosophy and psychology 1913-.

Sheldon, Walter D., born February 2nd, 1870, Windom, Minn. B. S., Wisconsin, 1891; Rush Medical, M. D., 1895; house physician, Cook County hospital, 1895-97; University of Vienna, 1901-03. Clinical assistant in medicine, 1904 to 1913; assistant professor of same 1913-.

Sheldon, Edmund P. Assistant in botany, 1890-92. Instructor 1894-95. Graduate of the University class of 1894.

Shellenbarger, Rufus Clark, instructor in physics 1911-12.

Shelton, Ida M. Assistant cashier, department of agriculture, since November 1909.

Shenehon, Francis Clinton, born December 20, 1861, Brooklyn, N. Y., son of Ellsworth S. and Ella Dalley Shenehon; m. Kate Bird Cross; three daughters; dean of college of engineering and professor and head of the department of civil engineering since 1910; B. C. E. 1895; C. E. 1900; many years practical experience as hydraulic engineer, mainly along lines of rivers, harbors and canals; in the service of the U. S. government; has done research work in hydraulics, especially river hydraulics, and on the preservation of Niagara Falls; publications in current technical and professional magazines along the line of specialty; member, Six o'clock club, Minneapolis, University and Campus clubs, A. S. C. E., Detroit engineering society, Minn. Surveyors and engineers, A. A. A. S., S. P. E. E., Permanent international assoc. of navigation congresses; Am. civic association, Mpls. civic and commerce association, Sigma Xi, Tau Beta Pi, Alpha Kappa Sigma, Delta Tau Delta.

Shepardson, George Defrees, born 1864, Cincinnati, Ohio, B. A. Dennison, Granville, Ohio; E. E., Cornell; D. Sc. Harvard '12; instructor in science, Young Ladies' Institute, Granville, Ohio, 1886-87; instructor in physics, Cornell, 1890-91; assistant professor of electrical engineering, University, 1891-92; professor, same, 1892 to date. Motor inspector and station operator, Boston Edison Company, 1887, electrical superintendent, Akron, Ohio, 1889-90; consulting engineer for various interests in Minnesota. Research in the theory of telephony. Author of numerous articles in the technical press, in proceedings of engineering societies; Electrical Catechism; Electric Train Lighting; Notes on Alternating Current Phenomena. Member of the American Institute of Electrical Engineers; National Electric Light Association; Northwestern Electrical Association; Society for Promotion of Engineering Education; Sigma Xi; Phi Beta Kappa; Minneapolis Engineers Club; Northwestern Railway Club; Illuminating engineering society; Jovian order; Member of the Jury of Awards of Pan-American Exposition, Buffalo, 1901; and at Louisiana Purchase Exposition St. Louis, Mo., 1904.

Shepperd, Juniata L., born in 1855, Charitan, Iowa; English and Scotch ancestry; instructor in cooking, school of agriculture 1896-98; and laundering 1898-02; and home economics 1902 to date; head of the department of domestic science 1896 to 1913; assistant professor to date. Oskaloosa college, Oskaloosa, Iowa, 1876 to 1881; A. M., Drake, '84; Pratt Institute '96; many years experience in graded and special schools and as assistant teacher of cookery at National Chautauqua assembly and in institutional management; research work in obtaining proper oven temperatures for baking meats, breads, cakes, etc.; tests on canning meats, vegetables and fruits by various means; cooking tests showing comparative value of different methods of roasting meats (in co-operation with animal husbandry division), cooking tests showing comparative value of different varieties of vegetables (co-operating with division of horticulture); publications—book on foods and cookery and book on laundering; member, Woman's club, National economics association, Grange; Disciple.

Sherwood, Charles D. Rushford. Regent ex-officio, Lieutenant-governor, January 11th, 1864 to March 4th, 1864.

Sherwood, Grace. Instructor in advanced course work, Morris school of agriculture, 1913.

Shevlin Fellowships. Four fellowships, each being the income from $10,000.00, were established in the graduate school, in 1910, through the gift of $40,000.00 by the late Thomas Shevlin, of Minneapolis. The donor designated the objects of these four fellowships as follows: Academic, Agriculture, Chemistry, and Medicine.

These fellowships have been awarded as follows: In 1910, Walter E. Anderson, academic; Mark J. Thompson, agriculture; Harold N. Brown and Ward Lambert. In 1911, William Bethke, academic; Henry John, medical; Arne G. Tolaas, agriculture.

In 1912, academic, to Etheleen Frances Kemp; agriculture, to Grover M. Conzet; medicine, to Henry John; chemistry, to Roger Wilson.

1913, academic, to Zoe Donaldson; agriculture, to Gerald P. Plaisance; chemistry, to Victor Yngve; medicine, reserved in order to offer double prize the following year.

Shimonek, Anton, clinical professor of surgery 1909-13.

Shipley, S. C., instructor in machine work 1909-10; assistant professor of mechanical engineering and superintendent of shops 1910-12; title changed from assistant professor of mechanical engineering to machine construction in 1912 to date.

Shipman, M. D., clinical professor (homeopathic) of otology, rhinology and laryngology, 1903 to date of death January 1907.

Shoop, Charles Franklin, born at Bainbridge, Pa.; English German ancestry; m. Clara Backus; instructor in mechanical drawing and assistant in engineering mathematics 1905-09; assistant professor of experimental engineering 1909 to date; B. S., Pa. state college, '01; B. S. in mechanical engineering, same, '04; experience as tutor and teacher; member society for promotion of engineering education, A. A. A. S.

Shumway, Royal R. Instructor in mathematics, 1903 to 1909; assistant professor to date. B. A., University, 1903.

Sibley, Henry H., Mendota. Regent 1851-February 14, 1860. Again appointed in 1869 and re-appointed for seven successive terms, serving till his death, which occurred on the anniversary of the charter of the reorganized University, February 18, 1891. President of the board from 1876 to date of his death February 18, 1891. General Sibley was born in Detroit, Mich., Feb. 20th, 1811. He was elected as delegate to Congress from Wisconsin in 1848 and immediately took measures of introducing a bill for the organization of a new territory to include what is now Minnesota, which was then, he contended, a part of Wisconsin; it was only after a long and bitter contest and owing largely to the tact and energy of Mr. Sibley, this bill became a law March 3, 1849 on the last day before Congress adjourned.

The new territory of Minnesota at once unanimously elected Mr. Sibley its first delegate to Congress. In 1853 he returned to private life and in the following year was chosen to represent Dakota county in the territorial legislature. He took a prominent part in forming the constitution for the State, being chairman of one of the two conventions that simultaneously produced the constitution under the enabling act. Mr. Sibley was chosen first governor of the State of Minnesota, his term expired Jan. 1, 1860. General Sibley had command of the forces that were raised to quell the Indian outbreak, which occurred August 1862. He made a brilliant success in this expedition and in 1865 was appointed brevet major general for efficient and meritorious services. From this time to the end of his life Mr. Sibley was actively engaged in business.

Sidener, Charles Frederick. Instructor in chemistry, 1883-89; assistant professor of chemistry, 1889-1904; professor of chemistry, 1904 to date. B. S., University, 1883; spent one year in Europe pursuing advanced work in his specialty. Author of Quantitative Metallurgical Analysis.

Sigerfoos, Charles Peter, born May 14th, 1865, Arcanum, Ohio, B. S., Ohio State University, 1889; Ph. D., Johns Hopkins, 1897. Assistant in zoology, Ohio State, 1887-89; instructor in comparative anatomy, same, 1889-91; instructor in biology, University of Virginia, 1891-92; assistant in zoology, Johns Hopkins, 1894-97; studied at Seaside in Jamaica, Massachusetts, North Carolina and Long Island, Assistant professor of animal biology, University, 1897-00; professor of zoology, 1900 to date. Member of Beta Theta Pi; Sigma Xi: Phi Beta Kappa; Fellow American Association for Advancement of Science; Member of American Naturalists and Western Naturalists Associations.

Sigerfoos, Edward. Born December 14, 1868, Potsdam, Ohio. Ph. B., Ohio State, 1891; Honor graduate U. S. Infantry and Cavalry School, Fort Leavenworth, Kansas, 1895. U. S. Army officer active service in Cuba and the Philippines, Rank of Captain, U. S. Army, 1898 to 1903. Professor of military science and tactics 1905 to 1909. L. L. B. (Minn.) 1908.

Sigma Alpha Delta. An inter-sorority organization of juniors, founded in 1895.

Sigma Alpha Epsilon. Alpha chapter established in 1902. Founded at the University of Alabama in 1856.

Sigma Beta was established in October, 1911. Its membership is limited to thirty. The purpose of the society is to promote fellowship between members of the junior and senior classes. Its activities include parties, spreads, and informal dances. It was organized as an all class affair but its membership has since been limited to juniors and seniors.

Sigma Chi. Alpha Sigma chapter established in 1888. Founded at Miami University in 1885.

Sigma Delta Psi is an honorary athletic fraternity which was organized at the University of Indiana in 1912. The national fraternity was organized with seven chapters enrolled, Minnesota being one of the founders. The purpose of the society is to stimulate in college students an interest and pride in all-round physical development, and to encourage regular participation, in some form of athletics, by the entire student body. Any matriculated

male student in the institution is eligible to membership by proving his athletic efficiency in certain stated events. The society has two grades of membership, senior or full membership, and junior membership. For admission to senior membership the candidate shall have a record as good or better than the following:—

100 yds. dash—11 3-5 sec:; 120 yds. high hurdles—20 sec., leaving all standing; running high jump—5 ft.; running broad jump—18 ft.; putting shot—16 lb.—30 ft.; Pole vault—8 ft. 9 in.; throwing baseball on fly—250 ft.; punting foot ball on fly—120 ft.; 100 yds. swim, continuous without floating or other rest; 3 mile in 18 min., and 30 sec.; 10 mile walk in 2 hrs., and 30 min.; tumbling—(a) front hand spring, (b) back hand spring, (c) front dive over 4 ft., obstacle; posture—erect posture especially of head, (committee should keep candidates under observation when the candidate is not aware of it).

The requirements for junior membership are as follows:—

100 yds. dash—12 sec.; 120 yds. high hurdles—20 sec., knocking down not more than four hurdles; running high jump—4 ft., 6 in.; running broad jump—16 ft.; putting 16 lb. shot—25 ft.; pole vault—8 ft.; throwing baseball on fly—200 ft.; punting foot ball on fly—90 ft.; 50 yds. swim, continuous without floating or other rest; three mile run in 20 minutes; 10 mile walk in 3 hrs.; posture—erect carriage especially of head.

It is further provided that no student shall be admitted to membership to the fraternity who is delinquent in scholarship. The charter members of each chapter shall consist of the president of the university and five other members of the faculty, the latter constituting the committee on certification. Minnesota's committee on certification is as follows:—Registrar E. B. Pierce, Professors C. D. Allin, Otto Zelner, E. P. Harding, L. J. Cooke. The fraternity awards a Greek letter key and a certificate.

Sigma Kappa Alpha. An organization of engineers established in 1907.

Sigma Nu. Gamma Tau chapter established in 1904. Founded at Virginia Military Institute in 1869.

Sigma Rho (Engineering), founded in 1888; established at Minnesota in 1910.

Sigma Tau. A permanent local society of senior young women.

Sigma Xi (Minnesota chapter) was chartered in 1896. Its membership includes faculty, alumni and graduate students and reaches a total of 453. Its purpose is to encourage original investigations in pure and applied science. Its activities include the holding of scientific meetings and lectures, and election to membership is based on research ability. Originally this society elected to membership members of the senior class on the basis of scholarship and scientific ability. At the present time practically only graduate students and faculty members are elected on the basis of results of research work published.

Signal Corps, a branch of the regular military organization of the University.

Simpson, Charles, Professor of pathology, 1883-87.

Simpson, C. D., assistant department of loans, University library, 1912 to date.

Sinclair, John F., special instructor in business law, extension division, 1913-.

Sivertsen, Ivar, clinical instructor in gynecology, 1912-13; instructor in same, 1913-.

Skinner, Charles Everett, instructor in rhetoric, 1911 to date.

Skinner, H. O., assistant in (homeopathic) clinical medicine and surgery, 1905 to 1909; professor of homeopathic materia medica to 1911.

Ski-U-Mah, The. A co-educationl literary organization of the school of agriculture.

Ski-U-Mah Quartet, The. Organized November, 1893. The members were R. P. Kline, Baritone; Clarence J. Zintheo, First Tenor; John M. Davies, Second Tenor; Thomas H. Hughes, Basso. Made first trip in spring of 1894. Took a trip through Minnesota and the Dakotas in summer of same year. Following year J. L. Adams was made basso and Thomas H. Hughes took the baritone. Trips were made at the Thanksgiving and Christmas vacations of 1894. The following year membership was not changed and successful trips were made. Messrs. Hughes and Davis graduated in 1896 and their places were filled by Messrs. Loy M. Burch and Horace A. Wilson.

Slade, Musa, instructor in English, Crookston school of agriculture, 1910-1911.

Slater, Edward K. Born June 28, 1870, Northwood, Ia. High school training. Had some experience in teaching country school, practical experience in butter making and dairying. Instructor in Dairy school, 1904 to 1908; associate professor of dairy husbandry, 1908-11.

Sletta, Ida Martha, assistant in domestic science, 1912-13.

Sloane, Marjorie F., secretary to the secretary of the General Alumni Association, since February, 1909.

Slobin, Herman Lester, assistant in mathematics, 1909; instructor in mathematics to date.

Smiley, William Yale, scholar in sociology and anthropology, 1911-12.

Smith, Arthur C., professor of poultry husbandry, 1913-.

Smith, Anna Mary, librarian, college of agriculture, instructor in library methods, 1908 to date.

Smith, Audrey Nina, scholar in sociology and anthropology, 1911-12.

Smith, Augusta Norwood, preceptress and instructor in English, 1876-80. Died February 26, 1886.

Smith, Charles A., Minneapolis, appointed to the board of regents in 1908 to succeed Daniel R. Noyes, deceased. Was reappointed in 1910 and resigned in December, 1912.

Smith, Charles E., professor of materia medica and therapeutics, 1883-87.

Smith, Clinton D., professor of dairying, 1890-91; professor of agriculture and director of the experiment station, 1891-93.

Smith, C. K., regent, 1851, 1852.

Smith, D. Edmund, assistant in ophthalmology and otology, 1894-99.

Smith, Edwin H., dispensary assistant, 1898 to date.

Smith, Greta Eulalie, assistant in domestic art, 1912 to date.

Smith, Harry E., instructor in mechanical engineering and woodworking, 1889-90, in mechanical engineering, 1890-93; assistant professor of mechanical engineering, 1893-95; also in charge of experimental engineering and shop work, 1895-1901.

Smith, Helen M., head of the loans department, University library, 1907 to date.

Smith, Howard R., born April 16, 1872, at Addison, Mich.; professor of animal husbandry since 1912; B. S., Michigan agricultural college, '95; graduate student at Wisconsin, 1899-00; science teacher, Tilford Collegiate Acad., Vinton, Ia., 1895-97; Chemistry and physics, high school at Rock Island, Ill., 1897-99; acting professor of agriculture, Missouri, 1900-01; professor of animal husbandry, Nebraska, 1901 to 1912; research work in animal nutrition, relation of animal conformation to gaining capacity, proportion of corn and alfalfa in beef production; member Soc. Prom. Agr. Sci., Breeders' Association, Soc. Animal Nutrition.

Smith, John Day, lecturer on American constitutional law, 1891-1905.

Smith, Norman M. Born September 22, 1875, Monticello, Iowa. Graduate Monticello, Ia,, high school; one year Monmouth college. Homeopathic dispensary since 1903. Assistant in clinical medicine and physical diagnosis to 1909.

Smith, Robert M., instructor in rhetoric, 1910-12.

Smith, Simeon, regent, February 28, 1860-January 13, 1861.

Smith, Samuel George. Born March 7, 1852, Birmingham, England, A. B. and A. M., Cornell; Ph. D., Syracuse; LL. D., Cornell; studied social and charitable institutions in the United States and in Europe. Pastor of People's Church, St. Paul, since 1888. Member of the State Board of Charities and Corrections; State Board of Visitors; School Board of St. Paul and Board of Regents of the University, January 7, 1898 to 1901, State Board of Parole. Professor of sociology, University, 1890 to date. Author of Retribution and other addresses; The Industrial Conflict; Social Pathology, Democracy and the Church; papers and addresses in reports of proceedings of the National Charities and Corrections; National Prison Association, etc.; articles in magazines and reviews.

Smitheys, Frank, instructor in internal medicine, 1913.

Snake and Skull, a sophomore society of 1909.

Snell, Edith, instructor in mathematics, geography and history, 1903 to —, school of agriculture. Now Mrs. P. H. Bennion.

Sneve, Harold, lecturer on mechanotherapy, 1899-02; clinical professor of mental and nervous diseases, 1909 to 1913.

Snyder, C. E., animal husbandry, 1911.

Snyder, Fred B., appointed in December, 1912, to the board of regents to fill out the unexpired term of Charles A. Smith, resigned. Term expires in 1916.

Snyder, Harry, professor of agricultural chemistry and chemist of the experiment station, 1891 to 1909; also professor of soils, 1906 to 1909. See first edition.

Social and Economic survey of a Rural Township in Southern Minnesota. The survey was made under the direction of Professor C. W. Thompson by Mr. G. P. Warber, of the senior class in the college of agriculture. It was published by the University as number one in Studies in Economics.

Social Statistics, Bureau of. At the June, 1913, meeting of the board of regents the bureau of social statistics was created and Mr. Edward Dana Durand, who had previously been director of the federal census bureau, was selected to have charge of this bureau. The research bureau of agricultural economics was made a sub-division in the newly created bureau of social statistics. The purpose of the bureau is to gather statistics and place the same in form to be of the greatest use to the people of the state of Minnesota.

Sociology and Anthropology Museum. Photographs and exhibits, showing the work in Charities and Corrections of the various state institutions; photographs and exhibits of leading national movements for better social conditions; wall-charts and maps which present graphically a large number of sociological facts, from various parts of the United States; a collection of plaster-cast crania and skulls, showing man's ancestors, fossil man from Western Europe, typical members of the various living races and sub-races, both normal and artificially deformed; a collection of face-masks in color, presenting well the

Oceanic peoples; a series of busts in white, presenting facial and cranial characteristics of a considerable number of different peoples; natural cranial, skull, and skeletal materials from some dozen different continental and insular geographic areas; the Guthrie collection of ethnologic specimens from the Bulu tribe of Kamerun Province, Africa, presenting the material culture of a savage people in the Tropics; a collection of American Indian stone implements, weapons, etc.

Soldiers' Medal. See Student Soldier Memorial Monument. a

Solenberger, Edward D., lecturer in economics, 1905-06.

Solensten, Rudolph, scholar in sociology and anthropology, 1910-11.

Sommers, Charles L., St. Paul, appointed to board of regents in 1910 to succeed Thomas Wilson, deceased. Term expires in 1915.

Sondergaard, Hans T. Born October 10, 1867, Bendstrup, Gram, North Schlesvig, Europe. Attended Waterloo Business College; North Indiana Normal; graduate University school of agriculture. Assistant instructor in butter making, 1899-04, Dairy school; instructor in cultures and starters, '04-05, instructor in creamery work, 1905 to date.

Soper, Edgar Kirke, instructor in geology, 1912 to date.

Sororities. *Alpha Epsilon Iota, Alpha Gamma Delta, Alpha Omicron Pi, Alpha Phi, Alpha Xi Delta, Delta Delta Delta, Delta Gamma, Gamma Phi Beta, Kappa Alpha Theta, Kappa Kappa Gamma, *Phi Upsilon Omicron, Pi Beta Phi.
*Indicates professional.

Sorority Houses. Alpha Phi, 323 10th Ave. S. E., and Kappa Alpha Theta, 314 10th Ave. S. E., sororities own their own house.

Southeast (Waseca) Demonstration Farm. This farm consists of 246.2 acres. This was established by act of the legislatures of 1911 which appropriated $35,000 for the purpose of establishing a demonstration and experiment farm near Waseca. The legislature of 1913 appropriated additional money to equip the farm with proper buildings, machinery and stock.

Spanish-American War. The total number of alumni and students who served in the war against Spain was 219. Of this number 52 were in the University at the time of enlistment; 53 reached the rank of commissioned officers; there were 165 privates; 28 graduates of the University enlisted; 136 of those enlisted have never graduated; 83 of those enlisted from the University have graduated from the University either before or since the war. One man enlisted and serving in the civil war has since enrolled in the University.

Spanish Cannon. A Spanish cannon was presented to the University in June, 1911, by Mrs. R. P. Yates, on behalf of her son, Capt. Yates, a former student of the University. The cannon is placed on the campus near the Armory and opposite the student soldier monument.

Spanish, Club, The. An organization of faculty and students who are specially interested in Spanish language and literature, for the purpose of furthering their knowledge of the same.

Spaulding, Salthiel M., professor (homeopathic) of mental and nervous diseases, 1888-89.

. **Spaulding, W. M.,** instructor in appliances for the treatment of cleft palate, 1890-91.

Special Summer Courses for Women. The course in the school of agriculture was not first planned to meet the needs of the young women and the demand was made upon the regents to provide such a course. This was done in 1894, when a so-called summer course for women was provided. This course which was offered in 1894, 1895 and 1896, lasted from late in April to late in June and was outlined specifically to meet the needs of the "mothers and daughters" of Minnesota.

Spencer, E. C., professor of surgical anatomy, 1888-91.

Spencer, Herbert R., lecturer on admiralty law, 1893-1904.

Spencer, Dr. John, hog cholera serum work and instructor in veterinary medicine, 1910-11.

Sperry, Ruth E., budget clerk, business office, 1911 to 1912.

Spiritual Factors in Social Progress. A series of lectures delivered before the student body by Reverend John Walker Powell, religious work director, during the second semester of 1912-13. Published in the Minnesota Alumni Weekly, beginning with issue of January 27, 1913.

Spooner, Charles S., assistant in entomology, 1912-13.

Sprague, Daniel W., accountant and recorder of the experiment station, 1887-90; accounting office, 1890-1904; assistant in accounting office 1904 to date. New York State Normal School; Pompey Academy, N. Y., Bryant & Shelton Commercial College. Taught forty-five terms.

Spratt, Charles Nelson, clinical instructor in ophthalmology and otology, 1912 to date.

Springer, Franklin W., born January 18, 1870, Anoka, Minn.; American ancestry; m. Grace H. Pierce; scholar in electrical engineering, 1895-97; instructor in same, 1897-1900; assistant professor, 1900-1907; professor to date; Bachelor of electrical engineering, '93; E. E. '98; four

years experience in electrical railway work; research work along the line of his specialty with publications in current periodicals relating to same, also series of articles on education in Germany and America with the "spherical want system;" member A. I. E. E., Soc. for promotion of engineering education, Tau Beta Pi,, Sigma Xi, Kappa Alpha Sigma, Delta Upsilon.

Spreistersbach, David, assistant analyst, division of soils, 1913-.

Stadon, John H., assistant in pharmacy laboratory, 1906-1907. Graduate of the University college of pharmacy.

Stakman, Elvin Charles, instructor in vegetable pathology, 1912-13; assistant professor to date.

Stafford, E. W., entomologist, 1910-11.

Staley, John C., clinical assistant in medicine, 1910-11.

Standing Tax Levy. The University receives a considerable portion of its income for current expenses from the tax levy of 23-100 of a mill. This plan was first adopted by the Legislature of 1893, and was to go into force August 1st, 1894. The tax was then fixed at 15-100 of a mill and was afterwards changed to 23-100 of a mill. It was evidently the intention of the legislature to have this tax levied and collected and in the treasury to the credit of the University on the first day of the fiscal year next ensuing, and to this end, there was appropriated $60,000 as an emergency measure to provide for the one year that must ensue before this plan could be put into operation. Governor Nelson vetoed this item in the appropriation bill and the University was without resources to pay its professors, salaries and current expense bills. The state auditor ruled that the money which had been received from the levy was available as soon as it was in the treasury and all auditors who have come after him have allowed this practice. The legislatures also, ten of which have met and made appropriations for the support of the University, have also acted upon the assumption that this was the practice to be followed. This fact causes the temporary deficiency nearly every year during the months of June and July and sometimes May, and also accounts for the actual surplus which exists upon the first of each August. The board of regents, have, in all their reports shown clearly the facts in the case and custom has sanctioned the practice which was at first technically not in accordance with the act of the legislature imposing this tax for the purpose specified.

Staples, Edith, instructor in domestic art, 1909-10.

Staples, Franklin, professor of the practice of medicine, 1882-87.

Staples, Hattie A., stenographer, business office, 1906 to 1907.

Staples, Henry L. Born September 21, 1859, Wales, Maine. Limerick, Me., Academy; Bowdoin, A. B., 1881; M. A., 1884; M. B., Maine Medical School, 1886; graduate work in New York City, and Vienna. Had experience in common and high schools. Instructor in medical Latin, 1890-92; instructor in clinical medicine, 1892-96; professor of clinical medicine, 1896 to 1913. Author of papers published in medical journals.

Stearns, Ozora P., Duluth, appointed regent December 13, 1890, re-appointed 1901, and resigned March 26, 1895. See first edition.

Steele, Franklin, Fort Snelling. Regent, 1851-1860.

Sternberg, Waldemar Marxowitch, instructor in chemistry, 1912 to date.

Stevens, H. F., lecturer on the law of real property, 1889-97, on law of trusts, 1897-98.

Stevens, Homer W., librarian of the college of law, 1905 to 1912.

Stevens, John H., St. Anthony. Regent, 1853-1858.

Stevens Seminary. See Agricultural land grant.

Stewart, Jeremiah Clark, born October 21, 1854, at Camden, N. J.; American ancestry; m. Isabel Raiche; instructor in chemistry and astronomy, 1875-76; professor histology at the organization of the college of medicine and surgery; later made professor of pathology; and still later, professor of principles of surgery to 1913; associate professor of surgery 1913-. B. S. and C. E., '75; M. D., Col. '84; published articles in technical and professional publications; member Minneapolis Minnekahda, and Auto clubs; Presbyterian.

Stewart, John T., born January 13, 1868, Loda, Ill., Irish ancestry; m. Ida B. Wilson; professor and chief division of agricultural engineering department of agriculture since 1909; B. S., Ill., '93; C. E., same, '09; practical experience in various lines of civil engineering, 1893-99; and in railroad construction and maintenance, municipal works, land surveys and drainage; 1899-1904 in topographic branch of the U. S. geological survey; 1904-08 in drainage office of the U. S. department of agriculture; research work includes investigations of methods for land drainage by levees, open ditches and under drains with numerous articles in publications upon topics related to the question of drainage and special engineering subjects; organized a company and was the captain of same during the Spanish-American war; member Alpha Zeta, American society of civil engineers, American society of agricultural engineers, Minnesota forestry association, Minnesota state horticultural so-

ciety, Sigma Xi, Western society of engineers; Presbyterian.

Stewart, Scharlottie, secretary to the librarian, 1907 to date.

Stinchfield, Frederick H., born May 8, 1881, Danforth, Me.; American ancestry; professorial lecturer in charge of the practice work of the Law school, 1912 to date; A. B. Bates; L. L. B., Harvard, '05; has been in active practice of law since 1905; Free Baptist.

Stomberg, Andrew Adin, born March 29, 1871, Carver, Minn.; Swedish ancestry; m. Caroline Holcomb; two sons; professor of Scandinavian languages and literature, 1907 to date. B. A., Gustavus Adolphus, '95; M. S., Minn. '96; graduate study, Leipsig, '97-98; Harvard, '04-05; professor of history, Gustavus Adolphus, 1898-1907; member board of publications Augustana book concern; chairman board of trustees of Gustavus Adolphus college; research work in Swedish history (Viking age, Catholic reaction period); editor of Tegner's Frithjofs Saga; numerous articles in Swedish and English periodicals and newspapers; member of Svithiod American Scandinavian society, society for the advancement of Scandinavian, study society for the encouragement of the study of Swedish, Minnesota art society; Lutheran.

Stone, Alexander Johnston, born September 7, 1845, Wiscasset, Me. Abbott's School and Oak Grove Seminary, Me., English and Classical School, Newton, Mass.; Harvard Medical; Bowdoin Medical; and Pittsfield Medical colleges. Considerable experience in common school teaching. Has been connected with various medical institutions. Professor of gynecology, from the organization of the department, in 1888 to date of his death, July 16, 1910. Editor of Northwestern Medical and Surgical Journal and Northwestern Lancet, for nearly thirty years; articles and correspondence for other journals. Ex-president of Ramsey County Medical, State Medical, Northwestern Editors' Association and Association of Military Surgeons of the U. S.; twice vice-president of the American Medical Association, Surgeon General N. G. S. M.; member of the State Board of Health until his death.

Storm, Ashley Van, born November 18, 1861, at Walnut, Ill.; parents were American born, father of German Dutch extraction; m. Elizabeth Ann Hayler; two sons and one daughter; professor and chief of the division of agricultural education and director of the summer session of the college of agriculture, 1912; Ph. B., Illinois Wesleyan, M. A., Iowa; experience in public schools and professor of agricultural education and head of the department, Iowa state college of agriculture and mechanic arts, at Ames, Ia.; has pursued investigations in status of normal training in secondary schools of United States; has published "Born short and born long," also results of investigations, "The elementary teacher," "Teaching agriculture," "The unprepared teacher of agriculture;" national chairman committee on secondary courses and of rural and agricultural department of N. E. A.; member N. E. A., Phi Delta Kappa, Delta Theta Sigma, National Geographic society, American association for improvement of agricultural teaching, National society of college teachers of education; Congregationalist.

Stone, Fred H., professor of poultry husbandry, 1912.

Storvick, O. A., assistant in dairy school, 1911.

Strachan, E. K., instructor in chemistry, 1913-.

Strachauer, Arthur Clarence, born in Minneapolis in 1883; German ancestry; m. Gertrude Louise Hale; one son; clinical assistant in surgery, 1909; instructor in surgery, 1911 to date; associate surgeon University hospital, 1913-; M. D. '08; special student University of Berlin, 1901-02; surgical interne Northwestern hospital; assistant surgeon Royal surgical hospital, Berlin, 1909-10; in partnership practice with Dr. J. E. Moore; author of some dozen articles upon surgical subjects, published in the International journal of surgery, and other medical and surgical publications; 1st lieutenant surgical reserve corps, U. S. A., regular army; member of Hennepin Co., Minnesota state and American medical associations and the Minnesota pathological society.

Strange, Dalston P., instructor in agriculture and natural science, 1872-73; assistant professor of agriculture, 1873-74.

Strickler, D. A.—Professor (homeopathic) of ophthalmology and otology, 1888-95.

Strickler, O. C., New Ulm, appointed regent, February 7, 1901, and served to March, 1907.

Strong Men. The University for several years was entered in the strong men's contests among the colleges of the United States. Each year Minnesota was among the leaders, and in 1900-01, had a liberal lead over all others. The records for the years when Minnesota was in the competition, are as follows: 1898-99, M. Ferch, 1242.4 kilos; 1899-1900, R. W. Allis, 1558.8 kilos; 1900-01, R. W. Allis, 1782.8 kilos.

Strout, Eugene Silas, clinical instructor in ophthalmology and otology, 1911-12; assistant professor of same to date.

Students' Christian Association, The, was organized in the year 1869-70 by a few of the students and faculty—Professor Jabez Brooks and the late Professor Moses Marston being prime movers in the enterprise. The association was incorporated, under the laws of the state, in October, 1883. The object of the society being to unite Christians, of whatever denomination, for the purpose of spiritual development and also for a more effective moral influence throughout the University. Its constitution expressly forbids the exclusion of any person on sectarian grounds, and in its Articles of Incorporation is found the following statement: "It shall be forever free from denominational control or influence," thus giving it the broadest basis of activity.

With the growth of the organization it became more and more evident to all interested in its success, that a permanent place should be provided for holding all meetings—social and religious. In 1883, at the suggestion of Professor Marston, a subscription was opened, and subsequently the consent of the board of regents was secured to erect a building on the University campus. It was thought that $10,000 would be sufficient to cover the expense of a suitable building, and after the subscriptions had been started among the faculty and student-body, the work was taken up by President Northrop and Professor Geo. E. McLean, and $12,000 was secured for the purpose.

The building is located on the college campus, the first to the right as the main gateway is entered. It is a two-story brown stone structure, consisting of a main floor and a high basement, the entrance facing the walk from University avenue to the main building. The main floor consists of three parlors that can be thrown into one large lecture room. On the lower floor are offices, game rooms and toilet room. The building was dedicated June 6, 1888.

In the early days of the University, when this was the only religious organization in the University, the work done by this association played a large part in University life. Active religious work was kept up and a course of lectures was provided, at which first class speakers were always to be heard. For four years, this course of lectures was provided through the courtesy of the First Congregational Church, which footed the bills. The association continued to thrive until about the end of the eighties, when the religious work, formerly done through this association, was largely taken over by the Young Men's and Young Women's Christian Associations, this association being an incorporated body continues to exist in form and holds the building which it has leased to the Young Men's Christian Association and which has been occupied by them since 1889.

Students' Christian Association Building. See foregoing statement.

Student Council. This council of academic students was founded in 1910, its purpose being to afford a suitable medium of exchange of opinions between the academic undergraduates and faculty and to maintain Minnesota traditions and customs and exercise general supervision over student affairs including class and publication elections and student breaches of conduct. The functions of this organization were assumed by the University Student Council which was organized in 1912.

Student Council (Agricultural). This organization, which includes all students of the department of agriculture, has as its object the advancement of the University and in particular the student interests of the department of agriculture. Organized in 1913.

Student Government Association was established in the fall of 1906 and included all women in the University. Its purpose was to have charge of Alice Shevlin Hall. This organization made rules for the guidance of those using Shevlin Hall and provided committees to enforce the rules. It controlled the social functions given in the building and the expenditure of any surplus receipts from the lunch room. This association was succeeded by the Women's Self Government Association in April, 1913.

Students' Handbook. This is published annually by the Young Men's and Young Women's Christian Associations of the University and is for free distribution to those interested. It is issued in the form of a vest pocket memorandum book and is full of information of value to students.

Student Health. See report of committee made to board of regents, May 13, 1910.

Students' Liberal Association, The. This association was organized January 25, 1887, and its avowed object a union of the student body, irrespective of creed or belief, to establish upon a broad and catholic basis, a course of lectures upon moral and religious topics. Succeeded by the University Liberal Association. I

Student Soldier Memorial Monument, The. The project to erect such a monument had its beginning with the appoint-

ment of a committee to secure and send Christmas presents to the student members of the 13th Minnesota which was then stationed in Manila. After the presents had been forwarded, Professor Arthur Edwin Haynes conceived the notion of sending to every student and former student of the University, who had enlisted and served

in the war with Spain, a simple medal of honor, as a token of appreciation of the faculty and students of the University. This was done and two hundred nineteen of these medals were struck off and presented to those entitled to them. The idea kept growing in the mind of this enthusiastic patriot who wrote a letter to the board of regents and made the first donation of "$10 toward a fund for placing on the University campus a fitting memorial for the former students of the University who served our country, in its army or navy, during the recent war with Spain." In response to his request, a committee was appointed, he being made the chairman, and upon his shoulders fell the chief burden of raising the funds to carry the plans through.

The sculptor, Theo. Alice Ruggles-Kitson, the most famous woman sculptor this country has produced, threw her heart into this piece of work in a way that made it one of her best. It is notable not only for what it commemorates but as a wonderful work of art. The statue of bronze stands nine feet high, six inches above heroic size, and portrays the soldier of 1898. See illustration. Cost, almost $6,000. The pedestal is of Vermont green granite and stands six feet high, weighing about seven tons. On the pedestal is a bronze table bearing the words—"Erected in honor of the students of the University who served their country in the war with Spain, 1898-9."

The monument is located opposite the entrance to the Armory. On either side of the entrance to the Armory, facing the monument, is a bronze tablet, the two bearing the names of two hundred eighteen men, giving their regiment and rank. On the base of the tower, by the main entrance is a smaller tablet which has the following inscription:—

"Brave souls survive the storms of shot and flame,
Their furloughs blossom in eternal fame."

Our Soldier Heroic Dead.

C. E. Payson Colwell, 13th, Minn. Vol. Inf.
Harry L. Currier, Corp., 13th Minn. Vol. Inft.
George H. Edwards, Q. M. Sergt., 3d Wis. Vol. Inf.
August Foss, Corp., 2nd Neb. Vol. Eng.
T. P. A. Howe, 1st Sergt., 1st Mont. Vol. Inf.
Charles McClure, Jr., 1st Lt., 30th U. S. Inf.
Sidney Pratt, 13th Minn. Vol. Inf.
Olaf H. Rask, 1st Lt., 14th Minn. Vol. Inf.
Fred C. O. Smith, Sergt., 15th Minn. Vol. Inf.

Unselfishness is a divine virtue:
No unselfish life is ever lived
In vain; it will have its effect
in uplifting the world.
Men may forget such lives,
but they are treasured forever
in the memory of God.
In so far as humanity perpetuates
the memory of these lives, does it
exalt itself.

Students' Trust Fund. The class of 1902, of the school of agriculture, left with the school a fund of $100 "to assist by temporary loans at a reasonable rate of interest, deserving students needing such help, who are not below the B class in the school." This fund is in charge of a committee consisting of the secretary, the principal, the preceptress, and the president of the A class.

Students' Volunteer Band. This organization includes men and women who are expecting to enter the missionary field at the close of their college course. This organization has been in existence many years.

Stumm, Thomas Wesley, born 1872, Cartersville, Ill. B. S., 1897; M. D., Rush Medical, 1901; interne Cook County hospital, Chicago, 1901-03; graduate work in Vienna, 1903-04. Three years experience in common schools. Clinical assistant in medicine, 1904-1907; clinical instructor to date. Author of Spastic Constipation; Diagnostic Significance of Albumen and Casts in Urine; Pathology of Syringomelia; Influenza; Some Remarks on Gastric Ulcer; The Diagnosis of Organic Diseases of the Stomach.

Styx, The. An organization of law students of 1908.

Sudduth, W. Xavier. See first edition.

Summer School. In 1881 the University offered for the first time summer courses in science for teachers and others interested in subjects offered. The subjects offered at that session were botany, chemistry, geology, mineralogy and zoology. The course extended through the month of July. The attendance was forty-two. In 1882 the school was continued and the subjects of botany, geology, German, English, rhetoric and elocution were offered, and the attendance was seventy-three. In 1883 the school offered courses in geology, chemistry, French and didactics. Professor Hall had special charge of the school.

In 1892, the state department of public instruction made provision for holding a summer school at the University. Provision was made for giving the work in two sections, a university section, to provide the training required by the teachers in high schools who desired further training in the subjects they were to teach or to carry work in the same lines of university grade, and elementary, for the training of teachers for the grades. The school has been carried along on substantially these lines to the present time. The work of the university section has been developed and advanced until it represents real university grade of work. The University is not officially connected with the school save for the fact that it furnishes its buildings and equipment for the use of the school and the further fact that the faculty of the University section is largely made up of University professors and instructors. The attendance has been as follows: 1892, 741; 1893, 489; 1894, 1008; 1895, 1217; 1896, 1234; 1897, 1245; 1898, 1187; 1899, 1015; 1900, 1019; 1901, 931; 1902, 1105; 1903, 818; 1904, 857; 1905, 868; 1906, 1019; 1907, 1046; 1908, 1218; 1909, 1286; 1910, 1188.

Down to 1911 the school was held on the campus in Minneapolis, under the general direction of the department of public instruction, but under the direct supervision and management of the University department of education.

Beginning with the session of 1911, the school was divided and the elementary section transferred to the department of agriculture. The University section only remaining on the campus in Minneapolis and the department of public instruction pays only a very small part of the expenses.

The work in the University section is accepted for credit on the regular University courses. The attendance in the University section has been as follows: 1892, —; 1893, 148; 1894, 243; 1895, 234; 1896, 257; 1897, 302; 1898, 380; 1899, 389; 1900, 290; 1901, 237; 1902, 318; 1903, 212; 1904, 210; 1905, 269; 1906, 336; 1907, 332; 1908, 418; 1909, 452; 1910, 457; 1911, 477; 1912, 494; 1913, 569—as follows—regular courses, 521; dental students, 5; medical students, 15. See Minnesota First geology class, 28.

The agricultural department has offered summer courses in traction engineering since 1908. The elementary, or teachers' training school, was opened at this department in the summer of 1911 with a registration of 997—distributed as follows, 889 in teachers' training courses, 70 in college work and 38 in traction engineering courses. The registration of 1912 was 982—distributed as follows: in teachers' training courses 853; 92 in college work and 37 in traction engineering courses. The 1913 registration was 1029—distributed as follows: the teachers' training school, 860; the college section, 131; the traction engineering course, 38.

During the summers of 1908, 1909 and 1910 courses were offered at the department of agriculture especially for teachers desiring training in agriculture. The registration for those three years was 90, 36, 38, respectively. During the summers of 1908, 1909 and 1910 courses in forestry were offered and the registration for these years was 18, 21, and 18, respectively.

Sundt, Mathias, demonstrator in pathology and bacteriology 1911-12.

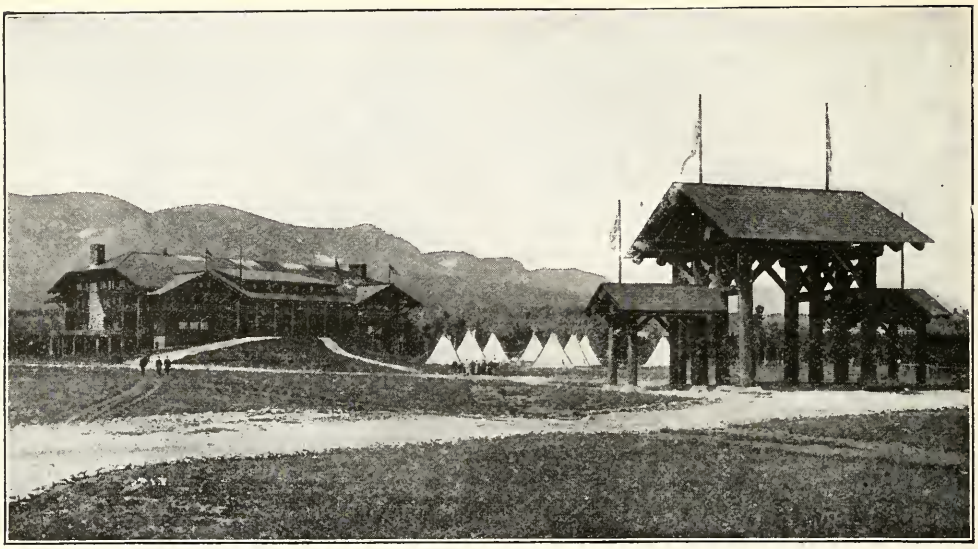
Supreme Court Law Library. A rare and unique addition to the law library was secured by the donation of Judge Collins and former Attorney-General Childs to the University of all the briefs and paper books in the cases argued in the supreme court of Minnesota since 1888, making a fine collection of over five hundred bound volumes.

Sutherland, Helen. Preceptress and assistant professor of Latin, 1871-76.

Sveggen, P. A., assistant in department of loans, University library, 1911 to 1912.

Svithiod was established in May 1911. Its membership is limited to 50 bona fide students of Swedish descent. Its purpose is to centralize the common interest of the Swedish element at the University and to promote the best elements of Swedish culture. This club maintains a club house, holds monthly meetings at which prominent men interested in the movement are the speakers. The club has a section of King Oscar II traveling library. It is purposed to establish similar clubs at other educational institutions and ultimately to form a national organization.

Swamp Land, (State Institution Fund). Under the state law of 1865 certain swamp



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lands were set aside to be sold for the benefit of state institutions. The state constitutional amendment which was adopted in 1881 acted to repeal the law of 1865 and the law of 1907 was passed to make effective the plain intent of the constitutional amendment of 1881. The fund from the sale of this land had grown to be $2,671,727.12 at the end of the fiscal year 1912. This fund is kept intact and only its income apportioned for the benefit of the state institutions. One-half of the interest goes to the common school fund and the balance to state institutions pro rata on the basis of the cost of maintenance. The University receives about $17,000 annually from this source at the present time.

Swanman, Ira, scholar in biology 1911-12.

Swanson, Helen M., stenographer, business office, 1910 to date.

Swearingen, Fred H., accountant at Morris Station since 1913.

Sweeney, Arthur, born August 25, 1858, Aurora, Ill.; m. Lulu A. Kelley; one daughter; professor of medical jurisprudence 1897 to 1913; A. B., Fordham University, '80; M. D., Harvard, '86; specialty, nervous and mental diseases; author of various clinical and other contributions to medical journals; founder of the natural history museum of St. Paul institute and has served as secretary of the same; member American, Minnesota state and Ramsey county medical associations.

Sweeney, Margaret, born in Boston; dean of women since 1912; B. A., Radcliffe College '99; Ph. D., Yale, '01; fellow, Yale, 1900-01; instructor in the department of English in Wellesley college; principal of a girl's school in Belmont, Calif.; vice president of the Berkley institute of Brooklyn, N. Y., until 1907; 1907-12, dean of women and assistant professor of English at Adelphi college, Brooklyn.

Sweet, John C. Lecturer on mortgage foreclosure, 1897.

Sweetser, Horatio B., born July 13, 1861, Brooklyn, N. Y.; American Irish ancestry; m. Teresa M. Higgins; two sons and two daughters; M. D., Columbia, '85; honor student; clinical professor of diseases of children 1898-99; clinical professor of surgery 1908 to 1913; hospital and private practice and teaching experience since 1893; research work has been entirely clinical in connection with hospital and private practice; author of various papers on medical topics published in technical and professional magazines; assistant city physician 1887-1888; member, County, state and American medical associations, Minnesota academy of medicine, Western surgical association; Roman Catholic.

Sweitzer, Samuel Edward, born December 14, 1877, Dennison, Ohio; American ancestry; m. Anna M. Whalen, '01; clinical assistant in dermatology and genito-urinary diseases, 1905-1912; instructor in same, 1912-13; assistant professor of dermatology, 1913; M. D., '01; studied in Vienna, Berlin and Paris; member Hennepin County, Minnesota State and American Medical associations.

Swenson, David Ferdinand. Born in Sweden, 1876. B. S. University, 1898; graduate student, 1898-02; same Columbia, 1905-06. Taught in an ungraded school, 1893-94. Assistant in philosophy, 1899-02; instructor, same, 1902-07; assistant professor, same, 1907 to 1913; associate professor to date. Columbia University, was assistant in charge of classes in Barnard College and Columbia College; frequent lecturer in Swedish and English, to young people; contributing editor on Veckobladt, a Minneapolis Swedish weekly. Author of reviews and articles in various philosophical and psychological journals. Member of Phi Beta Kappa, Sigma Xi, Western Philosophical Association, American Philosophical Association. 3101 Sixteenth avenue south.

Swenson, Esther L., scholar in English 1911-12.

Swenson, L. S., Albert Lea. Appointed regent March 1895 served until his successor was appointed in May, 1897. Born in Nicollet, Minn., in 1865. Graduated from Luther College, Decorah, Iowa, in 1886. Post graduate of Johns Hopkins, 1887. Appointed principal of Luther academy in 1888.

Swenson, P., assistant department of loans, University library, 1910 to 1911.

Swift, Fletcher Harper, Professor of Education; ancestry English, Dutch; Oswego high s.; boys high s. Brooklyn; B. A. Dartmouth, 1898; B. D. Union, 1903; Columbia, M. A., 1904, Ph. D. 1905; Honors—Prizes in English Comp. soph. sen.; Latin, jun.; sen. honors in philosophy; teaching fellow, Columbia, '04-05. Research work in education—translation of German and Latin source material; historical investigations in school systems of New York and the permanent school fund of six typical states; comparative study of Buddhistic and Christian doctrine of love. Publications:—History of public permanent common school funds; Joseph; a drama; the most beautiful thing in the world; Contributions to Monroe's

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encyclopedia of education. Teaching experience—elementary, to 1898; secondary 98-00; asst. in history of education, Columbia '04-'05; asst. prof. ed. U. of Wash., '05-'07; asst. prof. ed. Minnesota, '07-'09. Studied abroad, 1911-12. President interfraternity council, 1912-13; Phi Beta Kappa, Fellow A. A. A. S., Relig. Ed. Assn., Acacia, Alpha Delta Phi, Phi Delta Kappa, Minn. and Natl. Ed. Assns.

Swift, Henry A., St. Peter, regent ex-officio, March 4 to July 13, 1863, and governor July 11, 1863 to January 11, 1864.

Swimming Pool. The swimming pool was constructed in the University Armory in the fall of 1908 at an expense of $8,000. Five thousand dollars were contributed by the Athletic Board of Control and three thousand by the University.

Sylvester, G. W. P., technician in anatomy, 1911-12.

Taft, William Howard, former president of the United States, special lecturer on law, 1914.

Tales of the Old University Times. Gopher of 1892, pp. 272-276.

Tam O'Shanter, an organization of junior women.

Tate, James M., born December 10, 1852, Mercer county, Ill. Public schools of Illinois. Long practical experience as a pattern maker and in constructing and erection of machinery. Instructor in woodwork and pattern making and foundry practice, University, 1890 to 1907. Author of textbook on Manual Training, Foundry Practice.

Tau Shonka was established in September, 1908. It includes all academic fraternity men of the sophomore class. Its purpose is to bring the fraternity men of that class into closer relationship. It provides social meetings and dancing parties. Tau Shonka is one of four class interfraternity clubs.

Taylor, Mr., conducted a private school in the old academy building in 1856.

Taylor, N. C. D., Taylors Falls, regent, 1851-54.

Teachers' Certificates. This certificate is granted to all graduates of the College of Education who have maintained a good average of scholarship through four years of college work. Graduates of the college of science, literature, and the arts may receive this certificate under the following conditions: First, they must have maintained a good average of scholarship through four years of college work. Second, they must have the recommendation of at least one department concerned with high school studies. Third, they must have completed a semester course in psychology and twelve credits in education, or, a year course in psychology and nine credits in education. Including the class of 1913, 2172 such certificates have been granted.

Telescope. The students' astronomical observatory contains a ten and one-half inch refracting telescope furnished with a third lens for converting it into a photographic telescope; a filar micrometer, a spectroscope by Brashear; a students' meridian circle and zenith telescope; a Repsold photographic measuring machine, a chronograph, and astronomical clocks.

Temple, Sterling, born October, 1882, Morristown, Minn.; son of Judson C. and Isabelle Temple; m. Isabelle Matchett; two sons; instructor in chemistry, 1912 to date; Ph. B., Hamline, 1905; A. M., same '06; graduate student in chemistry at Harvard, 1907-08; three years experience in high school; four years in Dakota Wesleyan university; research work in terpenes under the direction of Dr. Frankforter; member American chemical society, Phi Lambda Upsilon; Methodist.

Tennis. The University has fitted up fifteen courts on the campus for the use of the students who play tennis. Minnesota has developed several tennis players who have won enviable reputations in competition with the representatives of other colleges and in other amateur competitions—notably John Adams, Joe Armstrong and Seiforde Stellwagen.

Thaler, Joseph A., instructor in engineering mathematics, 1900-01. Instructor in drawing, 1902-03. Graduate of the college of engineering, class of 1900.

Thalian Literary Society was established in 1902 and has a membership of twenty-five. Its purpose is the study of the drama. The society holds a spread once a month, gives a box party twice a year and holds meetings at which the drama is discussed. In the spring of each year the society gives a play. Usually a house party is held both in the spring and in the fall.

Thatcher, Roscoe Wilfred, born October 5, 1872, at Chatham Center, Ohio; son of Charles Phelps and Lida Elizabeth Thatcher; m. Nellie Elizabeth Fulmer; two daughters; professor of agricultural chemistry and chemist of the experiment station and chief of the division of agricultural chemistry of the department of agriculture, 1913; B. S., Nebraska, '98; A. M., '01; [instructor of science Beatrice, Nebr., 1890-1900; assistant chemist, Nebr. Agr. Exp. Sta., 1900-02; chemist, Wash. Agr. Exp. Sta., 1902-13; director of same 1907-13; associate professor of chemistry, Wash. State, 1903-10; professor of agricultural chemistry and head of department, 1910-13;] research work in soils, forage plants, composition of insecticides, wheat and flour investigations, methods of analysis, flour investigations, plant breeding for improvement of compositions, fermentology; member M. A. A., Chem. Soc., Assn. Agr. Chem.; Congregationalist.

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Theta Epsilon was established in 1900 with a membership of thirty. Its purpose is both literary and social, each formal program being followed by a spread. A program is made out in advance and each member of the society must take some part. The general topic for the year changes each year.

Theta Phi Fraternity. A local fraternity which was established in 1879 and which afterward became, Friday, May 22, 1891, the Nu chapter of the Psi Upsilon. The name Theta Phi was not adopted until the spring of 1881, at which time steps were taken to secure a society pin. A pin was adopted and members of the society first wore them at the annual Thanksgiving reception of that year.

Theta Tau (Engineering), founded at Minnesota in 1904; Alpha chapter.

Thomas, Edith, instructor in chemistry, 1902-03. Graduate of the University class of 1902, M. A., 1903. Died in 1903.

Thomas, George E., assistant in medicine.

Thomas, Joseph Morris, born November 15, 1876, Saugatuck, Mich.; son of George Henry and Anne Close Thomas; m. Jessie Edna Marsh; one son; professor and head of department of rhetoric and public speaking, 1909 to date; Ph. B., Mich., '98; A. M., same, '03; Ph. D., same, '09; high school experience in Michigan one year; University of Michigan eight years; a year and a half of experience with Allyn & Bacon, publishers; research work in the application of psychology and modern logic to rhetorical problems; member, English society of Great Britain, Modern language association of America, National English council, Minnesota educational association, Phi Beta Kappa.

Thomas, Uriah, Minneapolis, regent, February 28, 1860, to August 17, 1863. Died, October, 1865, at Doylestown, Penn. Born Norristown, Pa.

Thomas, William I., instructor in rhetoric, 1903-04.

Thompson, Carl William, born November 21, 1879, Evansville, Minn.; father born in Norway, mother in Wisconsin; assistant professor of economics and director of the bureau of research in agricultural economics, 1910 to 1912; associate professor of economics, 1912 to 1913; A. B., South Dakota, '03; A. M., Harvard, '04; graduate student, University of Chicago; research work in laboring conditions in packing industry of Chicago, History of Bonanza farms in Red River valley of the north; investigations in the marketing of farm products; director of a social and economic survey of a rural township in southern Minnesota; Movement of wheat industry; author of papers and reports along the line of his research work published as monographs and in current technical and professional journals; called to the U. S. bureau of agriculture to do special work along the line of marketing farm products spring of 1913; member American economic association, Minnesota academy of social science.

Thompson, Edwin J., Rushford, appointed regent, 1869, reappointed, 1870, resigning the same year to accept an appointment to the University faculty as professor of mathematics and astronomy, which position he held until the end of the college year, 1879-80. Entered the ministry of the Presbyterian church and continued therein until his death, January 23, 1907. He was born in Vermont in 1834. He was educated at Middlebury college. For two years was president of Albany college.

Thompson, John, assistant in agriculture, experiment station, 1902-03.

Thompson, Mark Joseph, assistant in agronomy, 1912-13.

Thompson, Ruth, scholar in history, 1910-11.

Thorne, Wilcox G., instructor in pathology, 1913-.

Thulanian Club, an organization of students and professors of Norwegian descent for mutual pleasure and helpfulness. It is practically a Norwegian fraternity. Founded in 1899. The club owns a house at 1025 Fourth street southeast.

Thursday Riding Club, an organization of young women of 1912.

Thurston, Edward Sampson, born August 8, 1876, New York, N. Y.; American ancestry; m. Florence Chapman Holbrooke; one daughter; professor of law, 1911, to date; A. B., Harvard, '98; A. M., same, '00; LL. B., same, '01; instructor of law Indiana University, 1906; assistant professor and professor of law George Washington University, 1906-10; professor of law University of Illinois, 1910-11; private practice in New York City, 1901-06; Episcopalian.

Thurstone, Louis Leon, born May 29, 1887, Chicago, Ill.; Swedish-German ancestry; instructor in department of descriptive geometry and engineering drawing since 1912; M. E., Cornell, '12; professional experience as assistant to Thomas A. Edison; member American institute of electrical engineers, Eta Kappa Nu, American society for promotion of engineering education; Lutheran.

Tierney, Dillon P., instructor in forestry, 1910-12; special lecturer in forestry, 1912-. Assistant state forester.

Tiffany, Francis B., lecturer on criminal law, 1894-98.

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1900

Tilden, Josephine Elizabeth, born Davenport, Ia. Received her training in the Minneapolis city grades and central high school. B. S., University, 1895; assistant in 1903 to 1909; professor of botany, 1896-98; instructor, 1898-03; assistant professor, same to date. Spent the summers of 1901 to 1907 at the Minnesota seaside station at Port Renfrew, Vancouver Island, B. C. Published Fresh-water Algae in Minnesota; a contribution to the bibliography of American Algae, 1895; papers on Calcareous Algae. Hot-Spring Algae, Yellowstone Algae, Vancouver Island Algae, Hawaiian Algae, etc.

Tillikum Club, The, an organization whose object is to promote acquaintance among the fraternity men of the senior class.

Times Good Road Prizes. The prizes were offered but once, in 1892. These prizes consisted of three gold medals, which were won by Mark Woolery, Jessie Stevens and N. B. Nelson.

Tinker, E. Fay, instructor in operative dentistry, 1910-11.

Titus, James L., assistant pharmacist, University hospital—out-patient department.

Todd, Frank C., born 1869 in Minneapolis; two years work in the college of science, literature and the arts; D. D. S., '91; M. D., '92; graduate work in eye, ear, nose and throat in America and Europe; clinical assistant and instructor in eye and ear, 1894-98; clinical professor eye and ear, 1898-1902; professor diseases of eye and ear, 1902 to date; in charge of division; author of many articles in technical and professional magazines dealing with his specialty. See first edition.

Todd, M. R., appointed regent, May 7, 1897, resigned, September 2, 1898.

Todd, T. W., special instructor in sales correspondence, extension division, 1913-.

Tolass, A. G., instructor, bacteriology, 1912 to date.

Tomhave, W. H., appointed instructor in animal by-products, college of agriculture, 1907, but resigned to take up work in the State College of Pennsylvania. Assistant professor animal husbandry, 1911-12; resigned to return again to Pennsylvania.

Torchlight Procession. On the evening of October 17th, 1911, the alumni and students held a torchlight procession on the University campus in honor of President Vincent whose inauguration took place the following day. There were one thousand alumni and four thousand students in the procession. The men and women alike wore caps and capes made specially for the occasion, the various groups being distinguished by a slight difference in the color of the capes. The men carried torches while the women were provided with Japanese lanterns. The affair was an unqualified success from every point of view. For full account of the same see the Minnesota Alumni Weekly of October 23, 1911.

Tousley, Orson V., Minneapolis, appointed regent, 1879, and served until January, 1883. See first edition.

Trailers was established in 1910 and has an active membership of 35. Its purpose is to promote interest in walking and other athletic activities. It conducts walking and skating parties, spreads, etc.

Traxler, Charles J., lecturer on code pleading, 1911-12.

Trefethen, Charles G., instructor in metal working, 1887-88.

Triangle Club, an organization which includes all fraternity men of the freshman class.

Trilling, Mabel B., instructor in textiles, 1913.

Tripp, Robert H., professor of Latin language and literature, 1878-1880.

Trott, John Clinton, instructor in architecture, 1910-11. Died, June 11, 1911.

Trufant, Nellie S., scholar in drawing, 1895-96; instructor in freehand drawing, 1890-1903.

Trussell, Emma F., registrar, 1883-84.

TRACK MEETS:

	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Wisconsin	Wis		Wis				Wis 47-69	Wis 75-37			Wis 81-44	Minn 78-53	Wis 79-47	Wis 18-108
Iowa		Minn	Minn		Minn			Minn 40-25	Iowa 15-1	Tie	Minn 58-54	Minn 95-31	Minn 86-41	
Nebraska					Neb			Neb 44-54	Neb 28-84	Neb	Neb	Minn 62-55	Neb 66-51	Neb 79-38
Chicago							Chi 44-82							
Northwestern						Minn 72-54								
Missouri														Mo 20-88

Conference track meet of 1911 was held at the University June 2 and 3, and was won by Missouri with 35 points.

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We have brought our University View Book up-to-date. This contains photogravures of all the University buildings, and late pictures of Ex-President Northrop, and President Vincent. These books are works of art and will be sent postpaid to any address on receipt of $1.00.

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MINNESOTA TRACK RECORDS

Event	Holder	Date	Record
100 yard dash	Stanley Hill	1910	09 4-5
220 yard dash	Stanley Hill	1910	22 flat
440 yard run	O. C. Nelson	1899	50 1-5
120 yard high hurdles	Mike Bockman Ben Harmon	1902 1909	15 4-5
220 yard low hurdles	Mike Bockman	1901	25 flat
Half mile run	Harris Ted Anderson	1901 1911	1:59
Mile run	Merdink	1913	4:33 3-5
Two mile run	A. Stadsvold	1912	9:45 4-5
High jump	F. W. Peterson	1911	5 ft.10 1/2 in.
Broad jump	Howard Lambert	1912	22 ft.11 1/2 in.
Pole vault	I. J. Coady	1911	11 ft.
Shot put	Leonard Frank	1912	44 ft.11 1/2 in.
Discus throw	Leonard Frank	1912	125 ft.
Hammer throw	W. Ganssle	1911	119 ft.6 in.

Tucker, Frederick D., principal of the school of agriculture, and instructor in mathematics, 1900-03.

Tuition. At the organization of the University, the theory was that the state should furnish education absolutely free to everybody who came. The only charges made in the early days were a charge of $5 for "incidental" expenses and a fee to cover the cost of laboratory material, in courses where such material was used. This so-called, incidental fee, was used to cover petty expenses and was not, until later years turned over to the state, but used during the year and any unexpended balance was turned over to the treasurer of the University at the close of the year. This plan obtained until 1889, when a law was passed changing the whole system of accounting and requiring all fees to be turned into the state treasury. Prior to that time the laboratory fees had been collected by the departments concerned and expended for supplies to take the place of those consumed.

With the establishment of the strictly professional departments, law and medicine, tuition was fixed on the general understanding that the tuition should pay a considerable portion of the running expenses of these departments, the state furnishing the plant. In actual practice, however, the fee fixed has had little logical relation to the cost of maintenance of the colleges. Fees have been increased from time to time, general increase being made in 1898 and 1902. The general policy in the changes made being to reduce the fees in all departments to a flat rate covering all charges for tuition and laboratory material. At the present time the rates are as follows:—

Required of every student in colleges of collegiate grade, annual deposit fee, $5, payable at registration—1st year medical and dental students are required to pay a $10 fee; a charge of $5 is made for an examination to remove a condition at other than regular fixed dates, and $5 for an examination for credit for work done out of class, unless such examination is taken during the first six weeks after first enrollment at the University.

Incidental fees are payable, one half on registration at the opening of each semester.

Science, literature and arts,	
The college of agriculture	$30.00
The college of education	30.00
Non-residents	60.00
Music courses	$64 to 128.00
Engineering and the Mechanic Arts	50.00
Law School	65.00
Medical School	150.00
Hospital fee, (juniors and seniors)	3.00
College of Dentistry	150.00
College of Pharmacy (2 yr. course) annual fee	$2.50
Three-year course. annual fee	55.00
School of Mines & Chemistry	55.00
The Graduate School	30.00

Special regulations govern in special cases which are quite numerous	
The School of Agriculture	$5.00
Non-Residents	10.00
The Dairy School	
Farmers' Short Course	
School of Traction Engineering	

Tuller, Charles E., appointed regent, May 15, 1900. His appointment was never confirmed by the senate and he served only until his successor was appointed, February 18, 1901. r

Tunstead, Hugh J., lecturer (homeopathic) on clinical obstetrics, 1902-04; associate professor of obstetrics, 1904 to 1909.

Tuthill, James E., instructor in history, 1905-06. Graduate of the University of Wisconsin.

Twenty-fifth anniversary program. The school of agriculture celebrated the 25th anniversary of the first graduating class, March 23-27, 1913. A very full report of the exercises of the week will be found in the Minnesota Alumni Weekly of March 31, 1913.

Twichell, F. E., demonstrator in charge of prosthetic clinic and instructor in con-

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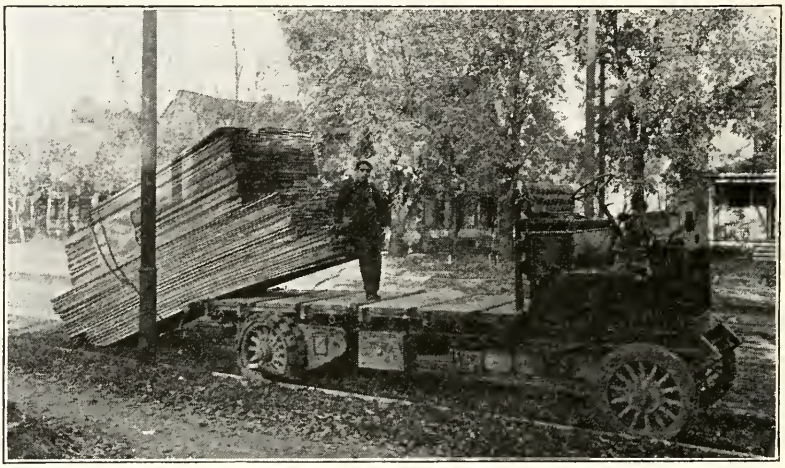

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tinuous gum work, 1890-92; instructor in continuous gum work and dental art, 1892-93.

Twining, Edward H., instructor in natural science, preparatory department, 1867-69. Professor of chemistry and instructor in French, 1869-71. Member of the first University faculty.

Tyrrell, C. C., prosector in anatomy, 1908-1909.

Ubrich, Henry, instructor in carpentry, 1906 to date.

Ulrich, Henry L., assistant in clinical microscopy and pathology, 1902 to 1911; instructor in clinical medicine to 1913; instructor in medicine, 1913-.

Underhill, Anthony L., assistant professor of mathematics since 1910.

Underwood, William, investigator in wood preservatives, 1911-12.

University Addresses, issued by the H. W. Wilson Co., in 1909. The book contains four addresses by Dr. Folwell while president of the University and includes his Inaugural address, The Minnesota plan, The secularization of education, and Civic education. In issuing this book Dr. Folwell has interpolated, in smaller type, notes suggested by conditions which have arisen since the addresses were made. The collection is exceedingly interesting and valuable to anyone who desires a survey of the progress of education in Minnesota during the forty years preceding the issuing of the book.

University and Agriculture. See Minnesota Alumni Weekly of September 30, 1912; see also pamphlet upon "What the department of agriculture has done and is planning to do for agriculture in Minnesota," by Dean Woods, published by the University.

University Band, The, is an official organization connected with the military department of the University and has been maintained since the department was first organized at this institution. The University provides an instructor who is known as the director of the band. The band gives public concerts, plays for the cadet corps on drill days and upon various public occasions about the University.

University Bulletins, The, published by authority of the board of regents twelve times a year—every four weeks during the University year. Bulletins sent gratuitously, postage paid, to all persons who apply for them.

University Catholic Association was established in 1901 and has a membership of 200. Its purpose is to more closely unite the Catholic students of the University and to foster a feeling of good will and good fellowship between Catholics and Protestants, and by conduct and influence to promote the moral and religious life of the University. Meetings are held every Sunday afternoon during the college year and semi-annual receptions, informal parties and an annual picnic are provided.

University Colors, old Gold and maroon. It does not appear that the University colors were ever officially selected and designated as the University colors. In the early days of the University, sometime between 1876 and 1880, President Folwell asked Mrs. Augusta Norwood Smith to select ribbon for the diplomas. Mrs. Smith, who was preceptress and instructor in English, chose the maroon and old gold and they made such a favorable impression that they were used the following year and gradually, without formal action of any kind, became recognized as the University colors.

University Council. This organization was established by act of the Board of Regents taken May 31, 1905. The membership of this board included the president of the University, the deans of the various colleges and schools and one elected representative from each school or college for every four hundred students or major fraction thereof, and one representative from the General Alumni Association. The duties of this Council were similar to those which were later assumed by the University Senate, an organization which superseded this organization, May 6, 1912.

University Extension. The Minnesota Alumni Weekly of March 24th, 1913, contains a very full statement of the University extension work offered by the University during the year 1912-13.

University Extension Service. For many years the University has offered more or less extensive courses of lectures to communities desiring the same. Outside the agricultural department such work was practically unorganized and it was not until recent years that a definite and positive effort was made to do systematic work in such lines. The legislature of 1909 made an appropriation of $10,000 to encourage extension work in education and economics. The time was ripe for the movement and the idea spread with great rapidity and now employs the whole time of a considerable corps of instructors, lecturers and demonstrators.

In the line of agriculture and home economics, the University was one of the first in the field, and such courses were offered and attracted large numbers as far back as '82-83. The attendance upon these courses reached the respectable total of 1,183. Then for a few years, the authorities seem not to have appreciated the significance of this movement and the work was dropped entirely. It was not resumed with anything like the previous success until 1885, when the farmers' institute work was started by the University. From that day to the present the agricultural department has been doing an ever increasing amount of such work, until at the present time, there is not a part of the state but feels the results of the work. The

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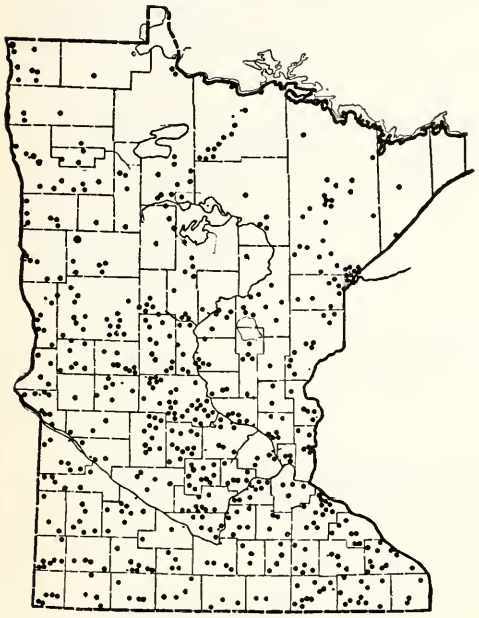
work done by the agricultural high schools, one hundred thirty in number, is a direct outgrowth of the work done by the University. The work is developing so rapidly that a statement made today is likely to be out of date tomorrow.

The work is now divided into two main branches, 1. General extension, and 2. Agricultural extension. The following is a fairly comprehensive statement of the work at present offered by the University.



University of Minnesota Alumni Weekly.

THE CAMPUS, UNIVERSITY OF MINNESOTA

Each dot represents a place where university representatives in person carried on educational work in 1911-2. Correspondence course centers are not included.

General Extension Division: correspondence and home study courses in collegiate, professional, and vocational branches; lectures either single or in groups, delivered by members of the University faculty in the various communities; lyceum courses of popular lectures, entertainments, and dramatic or musical numbers; University weeks, or six-day programs conducted in towns through the state; debating helps, references and guidance in the organization of debating societies; lantern slides for distribution in sets as loans to schools; municipal reference bureau for obtaining and furnishing information for city officials; social center guidance and co-operation for the wider community use of the school plant; night classes in business, education, engineering, law and collegiate branches; short courses of one week in merchandising and kindred subjects offered to communities that meet the requirements; extension centers for classroom instruction in industrial and other branches established in cities that meet the requirements; information on various subjects to be obtained from the proper University source and furnished to inquirers.

Agricultural Extension Division: farmers' institutes held in towns, villages or rural communities; demonstration farms—operation of private farms directed by extension men through frequent visitation; judges furnished for county and street fairs and judging demonstrations given; lectures either single or in groups, delivered by representatives of the agricultural college in communities meeting requirements; short courses of one week offered in agriculture and home economics, either separate or combined; rural schools aided in giving instruction in agriculture and home economics, and in conducting contests among boys and girls. Special instructors furnished county teachers' training schools; club work among boys and girls encouraged and guided—special organizer sent on request; farmers' clubs organized and encouraged, also speakers and suggestive programs furnished; county agents representative of the agricultural college placed in each county that qualifies; publications—extension bulletins and several periodicals dealing with agricultural education and agricultural news mailed free to interested persons; information furnished on all agricultural subjects by correspondence.

University Fellowship Association. This association was organized and articles of incorporation and by-laws were adopted March 10th, 1888. The association was the outgrowth of a preliminary meeting called by C. J. Rockwood and others at the West Hotel, February 22, of the same year. The association raised money to support fellowships at the University by subscriptions, most of the subscriptions being one hundred dollars each, payable one-fifth each year for a term of years. The total amount raised and distributed in this way was approximately $3,700. The following named persons received $250 each as follows for the years indicated:—

1888-89, U. S. Grant, '88;
1889-90, Oscar L. Triggs, '89, and Kendrick C. Babcock, '89;
1890-91, Joseph B. Pike, '90, and Louise Montgomery, '90;
1891-92, Theodore G. Soares, '91, and C. P. Lommen.
1892-93, Andrew Nelson, '92;
1893-94, Elizabeth Peters, '93;
1896-97, Alexander N. Winchell, '96;
1897-98, Paul M. Glasoe, '97;
1898-99, E. G. Jewett, '98; Harold M. Stanford;
1899-00, Clara G. Fanning, '99;
1903-04, Ernest E. Hemmingway.

No appointment has since been made and the association has not held any meetings since that date, so far as the records show.

University Free Dispensary. See under Hospital Outpatient Service building. See also Minnesota Alumni Weekly of March 6th, 1911.

University Hospitals. When, in the year 1905-06, the ownership of a teaching hospital system came within reach of the Uni-

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versity by the gift of $113,000 from the estate of the late Dr. and Mrs. A. F. Elliot, devised to the University, for this specific purpose, by heir executor, Walter J. Trask, Esq., the medical faculty petitioned the board of regents to provide for the equipment of temporary hospitals. This petition was granted and appropriations for equipment and maintenance were obtained from the legislatures of 1907 and 1909. Four of the residence buildings, acquired with the purchase of the new campus, were set apart for this purpose and equipped to provide 44 beds. These were maintained for over two years and gave the faculty an opportunity to organize its hospital system and to try out the new problems which the undertaking presented, before the first of the permanent buildings became available.

Under this system, only free patients are admitted to the University hospitals, and these come from all parts of the state. Admission is granted to suitable cases upon certificate of a local or county physician vouching for the indigent circumstances of the patient and stating the character of his complaint. The service is divided into three major clinics, medicine, surgery, and obstetrics, among which the available beds are divided. Special cases of nervous disorder, of diseases of the eye, ear, nose, and throat, and of children's diseases are especially provided for under these clinics.

The acceptance of the Elliot bequest by the legislature was encouraged by the gift of $42,000 by citizens of Minneapolis toward the purchase of a site. The long delay, incident to the acquirement of the new campus, in realizing the hospital project, added $7000 in interest to the original bequest and two legislatures further increased this amount by an appropriation of $40,000 for the enlargement of the building and of $48,000 for its equipment.

THE ELLIOT MEMORIAL HOSPITAL was not completed and ready for occupancy until late in the summer of 1911. It was dedicated, with appropriate exercises, on September 5th of that year. It is delightfully situated upon the high bluffs overlooking the River road, on the east and west bend of the Mississippi. It commands a fine view of the river to the east and of the city to the west. It is four stories and basement in height, built of Danville brick, with Bedford stone trimmings, and is thoroughly modern in type of construction and in design.

It has proved necessary still to maintain a number of temporary residences for nurses' homes, servants' quarters, steam laundry, superintendent's home, and isolation wards.

Following the dedication of the Elliot Memorial, the wards of the hospital rapidly filled and its superintendent is commonly obliged to carry a long waiting-list. It has already justified itself, not only on the score of its educational values, but, also, as an economic asset of the state. It is maintained under a support fund of $80,000. a year.

University hospitals. The first report of the superintendent, covering from March 22, 1909 to July 31, 1912, shows that during the period covered by the report 1864 cases were admitted to the hospital. Of this number 1665 were discharged and 123 died, 76 remaining in the hospital on the date of July 31st, 1912. The average number of patients for the last year of the period was 82.25. 718 clinics have been held and 75 necropsies performed. The average cost per patient per diem for the same period was $2.16.

The number of patients treated in the University Free Dispensary, the out-patient department of the hospital for the year ending July 31st, 1912, was 9229. The total number of visits were 33,190, giving a daily average attendance of 109 in this department. The cost per patient's visit was 17c. 13,513 prescriptions were issued during the year.

The report shows that from October, 1911, to July, 1912, inclusive, 4948 laboratory examinations were made in connection with the work of the hospital. Practically every county in the state has been represented in the patients in the hospital, 567 cases were medical; 942 surgical; 187 obstetrical; 159 births and 9 infants. Of the medical cases that were admitted, 82 were discharged recovered; 350 improved; 77 not improved and 58 died. Of the surgical cases 408 were discharged recovered; 382 improved; 103 not improved and 49 died.

The Elliot hospital building is supplemented by the use of a brick flat, 417-419 Delaware Street, as a nurses' home; a frame building, 324 Union street, also used as a nurses' home; a frame building at 413 Delaware street as a domestics' home; a frame building at 304 State street, as superintendent's residence and a frame building at 303 Washington avenue held in reserve for contagious cases developing at the Elliot Memorial building.

University Liberal Association, the, an organization of students and faculty members formed for the discussion of topics of broad and current interest. The association has provided, at various times, lectures of interest to the general University public.

University Press Club, The, an organization of men connected with various University publications and student reporters on the city newspapers. The purpose of the club is mainly social.

University Quartet, The, a musical organization of 1895. Its members were John Soper, First Tenor; A. T. Birdsall, Second Tenor; H. P. Ritchie, First Basso; F. C. Baldy, Second Basso.

University Service to the State, a reprint from President Vincent's first annual report published in the Weekly, January 20, 1913.

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University Song, The. The University song, Hail Minnesota, was originally the class song of the class of 1904. The song so appealed to the student body that it soon became, by general consent, considered the University song. The second verse of the original version of the song applied to President Northrop and was written as a tribute of the regard which the students feel for him. At President Northrop's suggestion, this verse was dropped and a second verse, written by Arthur Upson, '05, was substituted therefor. The song as it is now sung, consists of the first verse of the original, composed by Truman Rickard, '04, in collaboration with Rev. E. W. Shurtleff, and the second verse from the pen of Mr. Upson. The music was composed by Mr. Rickard.

Hail! Minnesota.

Minnesota, hail to thee,
Hail to thee our college dear;
Thy light shall ever be
A beacon bright and clear;
Thy sons and daughters true
Will proclaim thee near and far;
They will guard thy fame
And adore thy name;
Thou shalt be their Northern Star.

Like the stream that bends to sea
Like the pine that seeks the blue;
Minnesota, still for thee
Thy sons are strong and true.
From thy woods and waters fair;
From thy prairies waving far,
At thy call they throng
With their shout and song
Hailing thee their Northern Star.

See Minnesota Alumni Weekly of April 22, 1907, page 10. See also Forty years of the University of Minnesota.

University in the Spanish-American War. The total number of alumni, and students who served in the war against Spain, was 218. Of this number 52 were in the University at the time of enlistment. 53 reached the rank of commissioned officers; there were 165 privates. 28 graduates of the University enlisted; 135 of those enlisted have never graduated. 83 of those enlisted from the University have graduated from the University either before or since the war. One man enlisted and serving in the war has since enrolled in the University.

University Spring, The. In the early days of the University this spring was used to supply water to the University, a hydraulic ram raising the water to the buildings. Later the use of the hydraulic ram discontinued and the class of 1885 built a wall about the spring and fixed it up as a memorial. The spring was the source of drinking-water supply for many families living in southeast Minneapolis for many years. Owing to changes about the University and grounds the underground feeders of the spring were diverted and the spring ceased to exist.

University track records (special indoor events).

50-yd. dash	:05 3-5	Bockman,	1901
60-yd. dash	:06	Redman,	1904
1-4 mile run	:53 4-5	Harris,	
880-yd. run	2:03	Hull,	
1000-yd. run	2:56 2-5	Treadwell	
2-mile run	10:33 3-5	Bedall,	1910
Mile walk	7:29	Bunnell,	1897
60-yd. low hurdles	:07	Hasbrook,	1904
60-yd.high hurdles	:08 1-5	Bockman,	1901
		Ostvig,	1904
		Harmon,	1910
1-4 mile bicycle	:34 3-4	Sudheimer,	1900
Mile bicycle	2:29	Page,	1898
2-mile bicycle	5:57 1-8	Erb,	1896

University Year. The University year covers a period of thirty-eight weeks beginning on the second Tuesday in September, Commencement day being always the second Thursday in June. Up to 1901, the year was divided into three terms, the first ending at Thanksgiving time and the second about the last of February. The schools of agriculture have two terms, the first beginning about the first of October and running to Christmas time and the second from the first of January until late in March. The Dairy school term runs during December and the short course for farmers during January and part of February. The summer schools are in session from close of regular school year until about August 1st.

University Yell.

Rah! Rah! Rah!
Ski-U-Mah!
Hoo-rah! Hoo-rah!
'Varsity! 'Varsity!
Minn-so-ta!

also—

Rah! Rah! Rah! Rah! Rah! Rah! (accelerating)
Ski-U-Mah! Min-ne-so-ta!
(Tiger)

We have been unable to trace the history of this yell.

Unveiling of the Statute of John S. Pillsbury. A pamphlet of forty-six pages and cover, containing a full report of the addresses made on the occasion of the unveiling of the statue of John S. Pillsbury, September 12, 1900.

Urbahns, Theodore G., instructor in entomology, 1909-10.

Valedictorians. 1875, Helen Mar Ely; 1876, Martha A. Butler; 1877, Matilda Jane Campbell; 1878, Nettie Getchell; 1879, W. W. Keysor; 1880, A. W. Rankin; 1881, George B. Aiton; 1882, M. Louise Henry; 1883, Louise Hollister; 1884, Oscar Firkins; 1885, James Gray; 1886, W. F. Webster; 1887, A. B. Gould; 1888, P. R. Benson; 1889, Margaret L. Sewall, 91.73; 1890, Joseph Brown Pike, 93.20; 1891, C. P. Lommen, 95.18; 1892, Effie Ames Rochford; 94.55; 1893, Elizabeth Peters, 96.60; 1894, J. Harry Dewart, 94.28; 1895, J. J.

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20 Solder	.90	"	"	"	"	
22 Solder	.95	"	"	"	"	

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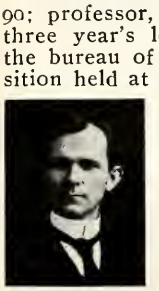
Boraas, 95.33; 1896, Elizabeth Beach, 96.68; 1897, Marion Potter, 96.13; 1898, Mary E. Olson, 96.58; For the following years the honor of "valedictory" was not awarded, but the students named were granted first honors for scholarship—1899, Ethel C. Brill, 94.59; 1900, Ida P. Lindquist, 95.21; 1901, Dagny Sunne, ; 1902, Lee O. Kellogg, . Scholarship honors were abolished after 1902.

Valedictory. Up to and including the class of 1888 the valedictorian and salutatorian were elected by the members of the class, without any specific reference to the question of scholarship. Beginning with the class of 1889, these honors were made a reward of scholarship, the valedictory going to the highest and the salutatory to the second highest student in point of scholarship. These honors were always confined to the members of the senior class of the college of science, literature and the arts. This custom was kept up until the commencement of 1899, when President Northrop delivered the first commencement address. From that time on student speakers for commencement exercises have been dispensed with. So long as the old custom of student orations was followed the salutatory was always given in Latin.

Valgren, Victor Nelson, born June 30, 1876, Skane, Sweden; m. Margaret Mary St. Clair; scholar in economics, 1908-10; instructor in same, 1911-12 and first half of 1912-13; B. A., Gustavus Adolphus, '05; M. A., Minn., '09; seven years experience in public schools of South Dakota; research work, The city and the water supply; Farmers' mutual fire insurance in Minnesota, published in the Quarterly journal of economics; member American Economic association.

Valleau, W. D., student instructor in horticulture, 1911-12.

van Barneveld, Charles Edwin, born at The Hague, Holland, November 26, 1869. Educated at the Lysee de Sainte Andre, France; Kings College, Windsor, N. S.; McGill University, Montreal, Canada. Practical work as a mining engineer and metallurgist in Colorado, New Mexico, California, Arizona, Mexico and Central America. Associate professor of mining, 1898-90; professor, same, 1899 to 1913. Given three year's leave of absence to manage the bureau of mines of the Panama exposition held at San Francisco.



Vance, William Reynolds, born May 9, 1870, Middletown, Ky.; Scotch-English ancestry; m. Anne Wilmer Hume; two daughters and one son; dean of the law school since 1912; A. B., '92, M. A., '93, Ph. D. '95, L. L. B., '97, Washington and Lee University; M. A. Hon., '08, Yale; professor of law, Washington and Lee University, 1899, dean of the law faculty, 1901-03; professor of law, Columbia University, 1903, dean 1905-10; professor of law, Yale university, 1910-12; member of bar in Kentucky, Virginia, District of Columbia, Minnesota and of the supreme court of the United States; has published a handbook on law of insurance and numerous articles in journals and encyclopedias; secretary of the association of American law schools, 1906-10; president same, 1910-11; chairman board of arbitration, Southern railway vs. order of railway telegraphers; member American Bar association, Minnesota state bar association, American political science association; Presbyterian.

Vander Horck, Max P., Professor of diseases of the skin, and genito-urinary organs, 1888 to 1912. Deceased.

Van Duzee, Charles A., instructor in operative dental technics, 1890 to 1901. Instructor in operative dentistry, 1899-1901; clinical professor of operative dentistry, 1901-02.

Van Sant, Samuel R., Winona. Regent ex-officio, governor, January 10, 1901-January 1905.

Van Slyke, Letitia, instructor in farm accounts, school of agriculture, 1906-07.

Van Voorhes, Abram, Stillwater. Regent, 1851-1860.

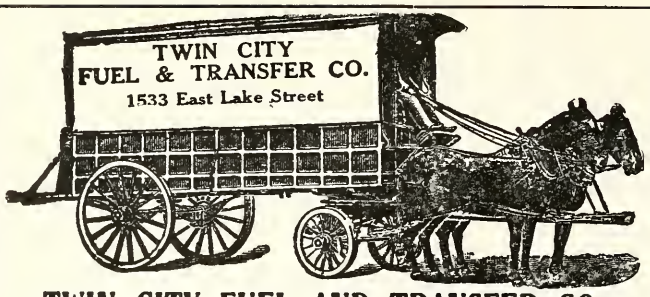
Van Winkle, June, born at Austin, Minn.; attended the state normal at Mankato; has taught in rural schools. Instructor in English, Morris school of agriculture, 1913.

Verein Gemuetlichkeit. An organization of men and women specially interested in German.

Vermilye, Elizabeth, laboratory assistant and clerk in home economics, 1913.

Veterinary Building. Erected in 1901, at a cost of $25,000. It contains, on the lower floor, the operating room with amphitheatre seats for eighty students; pharmacy and instrument room; box stall ward; open stall ward and contagious ward ; and two dissecting rooms. On the upper floor are a large museum and physiology class laboratory and private office. There are a number of new features in the stalls and stall fixtures of the hospital.

Vincent, George Edgar, born March 21, 1864, at Rockford, Ill.; son of John Heyl and Elizabeth Dusenbury Vincent; m. Louise Palmer; two daughters and one son; president of the University since April, 1911; A. B., Yale, '85; Ph. D., Chicago, '96; traveled in Europe and the Orient, 1886-87; literary editor of the Chautauqua press, 1886; vice principal of the Chautauqua System since 1888; principal of instruction, 1898; president



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Chautauqua institution, 1907; fellow in sociology, 1892-94, assistant, 1894-95, instructor, 1895-96, assistant professor, 1896-1900, associate professor, 1900-1904, professor, 1904-1911, dean of the junior colleges, 1900-1907, dean of faculties of arts, literature and science, 1907-1911, Chicago; author of Social mind and education, 1896; and An introduction to the study of society, in collaboration with Albion Woodbury Small, 1895; member of the leading educational associations of the country; associate on the editorial board of Hibbert Journal; frequent contributor to current sociological literature; since coming to Minnesota, President Vincent has spoken in nearly every county in the state and in some counties many times and has been in constant demand for public addresses before the leading organizations of the country.

Vocational Census of Students. This report of a special faculty committee was drafted by Professor J. B. Miner and was printed in the Minnesota Alumni Weekly of April 22, 1912.

Vocations Open to College Women. This is a pamphlet published by the University in the spring of 1913 and contains sixteen articles upon as many different lines of work open to women. The articles were prepared, for the most part, by women and in two cases by men who were specially fitted to speak upon the particular profession treated in the article.

Vye, John A., secretary of the department of agriculture, 1891 to 1910; at various times taught arithmetic, grammar, penmanship and farm accounts in the school of agriculture; author of Creamery accounting and Farm accounts.

Waaler, C. L., instructor in agricultural sciences since 1912, Crookston school of agriculture.

Wadsworth, Joel E., assistant professor of civil engineering, 1892-93, also in charge of mechanics and structure engineering, 1893-94; professor of structural engineering, 1894-95.

Wagner, Archibald, scholar in economics and political science, 1913.

Waitt, Henry M., instructor in engineering, 1882-1884.

Waka Club. An organization of young women, established St. Patrick's day, 1908.

Walker, George Warren. Born 1867, Silver Creek, Minn.; American ancestry; m. Bertha Stevens; two daughters; research chemist in soils, agricultural experiment station, 1909 to date; B. S. in chemistry, Minn. '09; research work, bulletin No. 128, Minnesota Agricultural series; member Sigma Xi, American Chemical society, Alpha Chi Sigma.

Walker, Versal J., professor of Latin from 1869 to date of his death, May 18, 1876. Member of the first University faculty.

Walling, Clara M., typist, University library, 1912 to date.

Walls, James Milton. Born September 7, 1870, St. Paul; Scotch ancestry; m. Anna Guernsey; one son and one daughter; student assistant in crown technics, 1892-94; assistant in crown technics, 1894-96; instructor in operative technics and demonstrator of operative dentistry, 1902 to 1908; professor of operative dentistry to date; three years' experience in the academic college, Minn.; D. M. D., '94, Minn.; eighteen years private practice; author of articles in technical and professional magazines; member National society of oral hygiene, National and state dental associations, North Dakota, Wisconsin, etc.; Presbyterian.

Walston, Genevieve, chief record clerk, office of the registrar, July, 1911 to October, 1911, and since May, 1912. B. A., 1908.

Walton, Lewis B., instructor in architecture, 1912 to date.

Wangelin, Hugo E., instructor in dental technics, 1890-91.

Ward, Mary (Mrs. G. S. Phelps), general secretary of the W. C. A., 1900-01.

Warner, Kenneth, assistant in animal husbandry, 1912 to date.

Warren, Frank M., instructor in military science, 1898-99, in charge of the department. Now engaged in mining engineering business, with headquarters in this city.

Warwick, Dr. Margaret, teaching assistant in pathology, 1913.

Washburn, Frederick Leonard. Born April 12, 1860, Brookline, Mass.; son of Nehemiah and Martha Parmelee Washburn; m. Frances Wilcox; two daughters; professor of entomology and entomologist of the experiment station and state entomologist since 1903; B. A., Harvard, '82; A. M., same, '95; graduate work at Johns Hopkins and at Chicago; has worked in the field of economic entomology for nineteen years; instructor in zoology, Michigan; professor of zoology and entomology experiment station of Oregon; professor of biology, Oregon, to 1902; research work has been in the field of economic entomology; has published numerous reports, bulletins and press articles relating to his special field; extensive experience in extension work, public lecturer; fellow A. A. A. S., member American Association of economic entomologists; Entomology society of America, American society of Naturalists; Unitarian.

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Washburn, Robert Mann. Born September 20, 1874, Monticello, Minn.; New England ancestry; m. Alice Wiltse; one son and three daughters; associate professor of dairy husbandry, 1912 to date; graduate of the Minnesota school of agriculture; B. Agr., Minn., '01; M. A., Mo., '08; ten years' experience; five years' teaching experience; research work and publications, reports in the experiment station and popular bulletins of Missouri and Vermont, member Civic league, Mo., Grange, Vt., American society of animal nutrition, official dairy instructors association, N. W. Asso. Dairy officials, State breeders and dairy associations; Methodist.

Washburn, W. W. The principal of the University from 1867 to 1869. This was in the days when the University existed simply as a preparatory department and before it was organized as a University. Mr. Washburn was professor of German and Latin as well as principal of the preparatory school, which opened October 7, 1867, and went out of existence with the re-organization and election of a University faculty, August 23, 1869.

Waters, Claire C., instructor in French, 1901-03.

Watson, J. A., clinical instructor in diseases of nose and throat, 1909-10.

Watson, Nathan L., assistant in technics and clinics, college of dentistry, 1895-96.

Waugh, Charlotte, scholar in botany, 1911-12.

Webster, Albert M., instructor in medical and pharmaceutical Latin, 1902-04.

Weeks, Thomas E. See first edition.

Weiser, Bruno, preparator in animal biology, 1910 to date.

Weiss, Andrew Joseph. Born June 30, 1868, Stephensville, Wis.; German ancestry; m. Jennie B. Henderson; two sons; instructor in technics, college of dentistry since 1900; Methodist.

Weiss, Oscar A., student assistant in operative technics, 1892-93; D. M. D.; assistant in operative technics, 1893-95; instructor in operative technics, 1895-96; clinical professor of prosthetic dentistry and crown and bridge work, 1906-07; professor prosthetic dentistry and orthodontia since 1907.

Weld, Louis Dwight Harwell, born April 18, 1882, Hyde Park, Mass.; American-English ancestry; m. Barbara Applegate; one son; assistant professor of economics, extension division, 1912, to date, acting director of the bureau of research in agricultural economics; A. B. Summa cum laude, Bowdoin, '05; Am. Univ. of Ill., '07; Ph. D., Columbia, '08; experience as instructor in the University of Washington, and at Pennsylvania; statistician New York public service commission; research work in private freight cars and American railway; publications, report on research work and on practical salesmanship, together with various articles in economic journals; statistician census bureau; member Phi Beta Kappa, Theta Delta Chi; Unitarian.

Weller, Marian, assistant professor of textiles, appointed to begin work August 1, 1914; at present engaged in special preparation at Columbia University.

Wellington, Richard. Born October 10, 1884, at Waltham, Mass.; New England ancestry; m. Minerva Collins; assistant professor of pomology, 1913; B. S., Mass. Agricultural college, 1906; M. S., Harvard, 1911; New York Agricultural experiment station, Geneva, 1906-13; research work in plant breeding with tomatoes, melons, cucumbers, grapes, raspberries, apples and tobacco: co-author of "The grapes of New York," 1909; "The plums of New York," 1911; New York agricultural experiment bulletins 288 and 350; author of New York agricultural experiment bulletin 346; article in American National, Vol. XLVII., May, 1913; member Horticultural society and American breeders association.

Wells, Amos S., assistant demonstrator in histology and dental anatomy, 1905-07; dental anatomy, 1907-09; instructor in prosthetic dentistry and crown and bridge work to 1911; clinical professor crown and bridge work to 1912; associate professor to date.

Wells, Charles L., professor of diseases of children, 1888-1897.

Wells, Charles Luke, assistant professor of history, 1894-97; professor of history, 1897-1899; resigned to accept a position as dean of the Cathedral church, New Orleans, La. See first edition.

Wells, H. Journey, clinical assistant in diseases of the eye and ear, 1906-1911; clinical instructor in ophthalmology and otology, 1911-13.

WELLS, James O., instructor in crown and bridge work, 1898-1901; also operative technics, 1901-02; professor of crown and bridge work and porcelain art, 1902 to 1908.

Wentling, John P., born February 1, 1878, Knox, Pa.; assistant professor forestry, 1908 to 1912; associate professor, same, 1912, to date; A. B., Franklin and Marshall, '02; A. M., '05; teacher in public schools of Pennsylvania, 1896-97; U. S. Forester, 1902-06; professor of forestry, Pa. Forest Acad., 1906-08; research work in reclamation of sand dunes; sylvics and sylviculture; wood utilization; member Society Foresters, Pa. Forestry Association, Minnesota Forestry Association.

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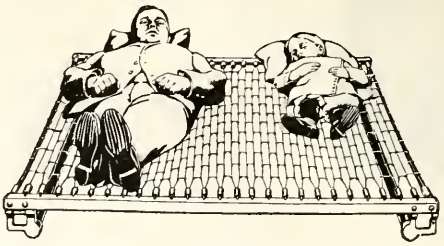

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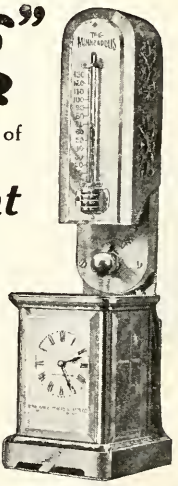

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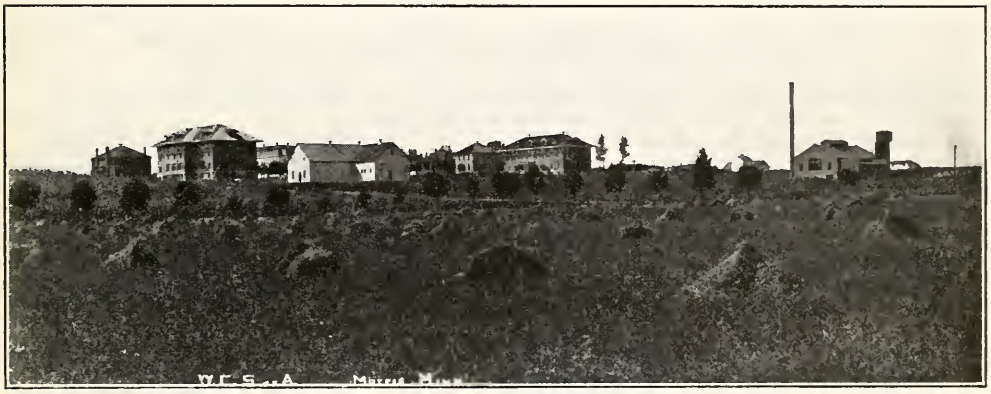
Wesbrook, Frank Fairchild, professor of bacteriology, 1895; pathology and bacteriology, 1896-1913; dean of the college of medicine and surgery from 1906 to 1913; member of the Minnesota state board of health, 1896-1900; and director of its laboratories. Resigned to accept a position as president of the University of British Columbia at Vancouver, B. C. See first edition.

West Central (Morris) School of Agriculture and Experiment Station. The legislature of 1909 accepted from the national government the gift of property formerly used for an Indian school located at Morris, Minn. This school was originally opened in the early eighties as a Catholic Indian mission school. Later the government took over this school and made it a real government school for Indians. It was always maintained, however, as a non-reservation school. In accordance with the general policy of the government, it was decided to discontinue work at this school, hence the offer to the state of Minnesota. The control of the school was placed with the Board of Regents and work opened October 3, 1910, with courses similar to those offered at the school of agriculture at St. Anthony Park. During the first year 103 students were enrolled. The following year 93 students were enrolled. The original farm comprised 292 acres and some 75 acres additional have been rented for the use of the school.

At the date of the opening of the school the following buildings were in use: Office, $15,000; agronomy, $12,000; Home economics, $12,000; dining hall, $20,000; laundry, $4,000; hospital, $10.000; cottage, $2,500; warehouse, $1,500; ice house, $100; morgue, $200; machine shed, $50; barn, $2,500; silo, $450; total, $80,300.

The experimental work done at this place has been along two principal lines, the adaptation of corn and small grains to meet more fully the needs and requirements of the soil and climatic conditions of this section of the state, and second, the application of systems of crop rotations to the farms of this section.

For full information see president's report of 1911-12, pages 105-08. See also Minnesota Alumni Weekly of November 7, 1910.



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Western Intercollegiate Gymnastic Association (W. I. G. A.) was established in 1902. Annual meets have been held at the respective colleges composing the membership of the association—Minnesota, Chicago, Illinois, Wisconsin, Indiana, Iowa, Nebraska, Washington (St. Louis), Grinnell. Twice the association has met at Minnesota, in 1903 and 1910. Minnesota has won three meets, those of 1903, 1907 and 1910.

Western Student, The, an article by Professor William Stearns Davis in the Century Magazine of —, 1911.

West, Margaret, instructor in University high school, 1912-13.

West, Rodney Mott, assistant in chemistry, 1909-12; assistant professor to date.

West, Willis Mason. Born November 15, 1857, St. Cloud, Minn. B. A., University, 1879; superintendent of schools, Duluth, 1881-84; Faribault, 1884-91; professor of history, University of North Dakota, 91-92; professor of history in University, 1892 to 1912. Author of Ancient History, to Charlemagne; Modern History; the Ancient World; History of the University of Minnesota.

Westermann, William Linn. Born September 15, 1873, Belleville, Ill. high school, Decatur, Ill, 1890; Nebraska, A. B. 1894; A. M., 1896; Berlin University, Ph. D., 1902. Taught two years in preparatory department of the University of Nebraska; three years in high school, Decatur, Ill.; four years instructor and assistant professor of history, University of Missouri; assistant professor of history, University, 1906 to 1908. Author of book reviews, Kleitor-Polyklitos; Inter-state Arbitration in Antiquity.

Westman, B., accountant, business office, 1911 to 1912.

Westover, E. L., student assistant in animal husbandry, 1911-12.

Wethall, Anton G., clinical assistant in genito-urinary diseases, 1911 to 1913; assistant in genito-urinary diseases, 1913.

Wheaton, Charles A., professor of the principles and practice of surgery. 1888-1902; emeritus professor of surgery, 1902 to date.

Wheaton Library. In the spring of 1912, Dr. Charles A. Wheaton, professor emeritus of surgery, who has been connected with the college of medicine and surgery since its beginning, presince its beginning, presented the University three thousand valuable volumes sented the University three thousand valuable volumes from his medical library.

Wheaton, Robert A., clinical instructor in surgery, 1895-1897.

Wheelan, Ralph, lecturer on the law of torts, 1889-91.

Wheeler, William A., instructor in botany, 1900-02; wood technology and diseases of wood, 1902-03. Graduate of the college of agriculture, class of 1900 and 1901.

Wherland, H. L., assistant engineer, 1903-06.

White, Albert Beebe. Born September 11, 1871, Holbrook, Mass.; English ancestry; m. Mabel White Jones; one son; instructor in history, 1899-00; assistant professor same, 1900-07; professor same, 1907 to date; B. A., Yale, '93; Ph. D. Yale, '98; experience in private preparatory schools and public high schools from 1893-99; research work in 13th century English history, the special subject being the origin of the house of commons; author of The making of the English constitution, '08; The first concentration of juries, 1911; member American historical association, Phi Beta Kappa; Congregationalist.

White, B. D., instructor in butter making, 1898-1905.

White Dragon Society is an inter-fraternity society, composed of members chosen from the different fraternities. Only these men who are "odd year" men are eligible. The members are chosen at the end of their second year.

White, Frank William, instructor in animal husbandry, 1910-13.

White, Hall B. Born June 6, 1879, Winnebago, Minn.; American ancestry; m. Elizabeth M. Chase; instructor in carpentry, 1912 to date. B. S. in agriculture, 1908.

White, S. Marx. Born July 16, 1873, Hokah, Minn. High school, Sandwich, Ill., 1891; B. S., University of Illinois, 1896; M. D., Northwestern University Medical School, Chicago, 1897. Interne Cook County Hospital, 1897-98. Graduate work in internal medicine and pathology, Vienna, 1904, Junior demonstrator of pathology and bacteriology, 1898-1900; assistant professor, same, 1900-05; associate professor, same, 1905 to 1913; associate professor of medicine, 1913-. Tuberculossu Glomerulitis; The Pathology of Typhus Fever; Some side lights from recent literature on the pathology of pneumonia. Specialist in internal medicine and pathology; member of medical staff of Northwestern hospital; Pathologist of City and St. Barnabas hospitals.

Whitmore, John, instructor in charge of department of physics, 1887-89. See first edition.

Whitney, Ella A., secretary to the president of the University, 1897 to date.

Whitney, Helen Ardell. Born at Wolcot, Vermont; American ancestry; assistant in rhetoric, 1906 to—; instructor in rhetoric to date; B. L., '00, M. A., '09, Minnesota; experience in teaching in public schools, 1900-03; and in the University of Montana, 1903-06; Congregationalist.

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Whitridge, Grace B., instructor in physical culture, school of agriculture, 1901 to 1911.

Whitson, Lloyd Robert, instructor in drawing, 1911 to date.

Wiethoff, Charles Albert. Born February 18, 1887, Minneapolis; German ancestry; instructor in crown and bridge work, 1910-1912; assistant professor of same, 1912 to date; D. D. S., '09, Minnesota; member National and state dental associations, Minneapolis dental society, Delta Sigma Delta; Protestant.

Wiggin, Richard Septimus. Born June 2, 1882, Hassan, Minn.; of early New England ancestry; m. Anna F. Aubrecht, '02; one daughter; instructor school of law in charge of office of clerk of court, 1912 to date; LL. B., Minn. '07; eight years' experience as deputy clerk of court, at present assistant county attorney; in charge of work for county commissioners; Episcopalian.

Wilcox, Archa Edward. Born November, 1876, Minneapolis. Minneapolis public schools; Minneapolis Academy; east high school; special student, University of Buffalo, N. Y.; four years at the University of Pennsylvania; German Hospital, Philadelphia, three years. Quiz master, Hamline, anatomy, two years. Assistant in clinical surgery and quiz master in surgery, 1906-07; clinical instructor in surgery, 1912-13. Contributor to medical press.

Wilcox, Asa S., professor (homeopathic) diseases of women, 1894-95; Senior professor of practice of medicine, 1906 to 1909.

Wilcox, M. Russell, demonstrator of physiology, 1897-1907; assistant professor of physiology, 1907 to date.

Wilcox, Van H., assistant in operative surgery, 1903-1906; instructor in same, 1906 to 1909.

Wilcox, W. W., student instructor in horticulture, 1911-12.

Wilde, Norman. Born June 12, 1867, Dobbs Ferry, N. Y.; English ancestry; m. Edna M. Judson; one daughter; instructor in philosophy, 1898 to 1900; assistant professor, 1900-03; professor since 1903; A. B., Columbia, '89; A. M., '90, Ph. D., '94; student at Berlin, 1891-93; at Harvard, 1893-94; assistant and lecturer at Columbia, 1894-98; published dissertation on Friederich Heinrich Jacobi, 1894, and various articles in history of English ethics; publications in various technical journals and magazines; member Phi Beta Kappa, American philosophical association, Western phil. association, American psychological association, fellow A. A. A. S.; Presbyterian.

Wilder, Helen A .,instructor in rhetoric, 1896-1901.

Wilder, Susan. Born at Morristown, Minn.; A. B., '08; B. S. in Home Economics, '09, Minnesota; taught in rural school and high school one year each; instructor in domestic art at Morris school of agriculture since 1910.

Wildes, Marjory, law library, 1911 to 1912; engineering library, 1912 to date.

Wilhoit, A. D., assistant in chemistry, department of agriculture, 1906-07; instructor in soils, 1907 to 1909.

Wilkin, Matilda Jane Campbell. Born January 27, 1846, Harrington, Me. Public schools of Harrington; Washington County Academy, East Machias, Me.; Salem Normal School, Salem, Mass.; B. L., University, 1877; studied at University College, London, England, and at Gottingen, Germany, M. L., University, Graduate work at the University of Chicago. Taught five years in district school of Washington county, Me.; one term Wrentham, Mass.; three years in grades and one in high schools of Minneapolis; Instructor in German and English, University, 1877-1892; assistant professor of German, 1892 to 1911. Author of English-German Idioms, 1899; revised edition, 1906.

Wilkinson, Eleanor M., instructor in dietetics, 1899-1901; also in physiology, 1901-1904.

Will, Arthur B., lecturer on circumstantial evidence, 1894-95.

Willard, Charles A., lecturer on the law of bailments, 1888-1900.

Willard, Daniel E. Born August 22, 1862, at Nile, N. Y., English ancestry; m. Emma Davis; one son; lecturer on forest soils, 1912 to date; A .B., Alfred University, '88, A. M., same '90, graduate work at Chicago; principal Albion Acad. '88-'92; professor natural sciences, North Dakota normal school, 1895-03; geologist North Dakota college, 1903-10; with Northern Pacific railway, 1910 to 1912; research work in development of natural sciences along the Northern Pacific railway, artesian water, soil map of North Dakota, The story of the prairies, published in the U. S. geological reports; fellow A. A. A. S.; Episcopalian.

Willey, Louis Earl, instructor in veterinary science, 1911 to date.

William Jennings Bryan Prize, The. In 1898 the Honorable William Jennings Bryan gave the University the sum of $250 for the encouragement of studies in political science. Originally the annual income was given as a prize to the writer of the best essay upon a topic announced each year. The competition being open to all students of the college of science, literature and the arts. In 1912 the regents voted to make the offer quadrennially, the accumulated income of four years, $50 to be offered under conditions that originally governed the award of the prize.

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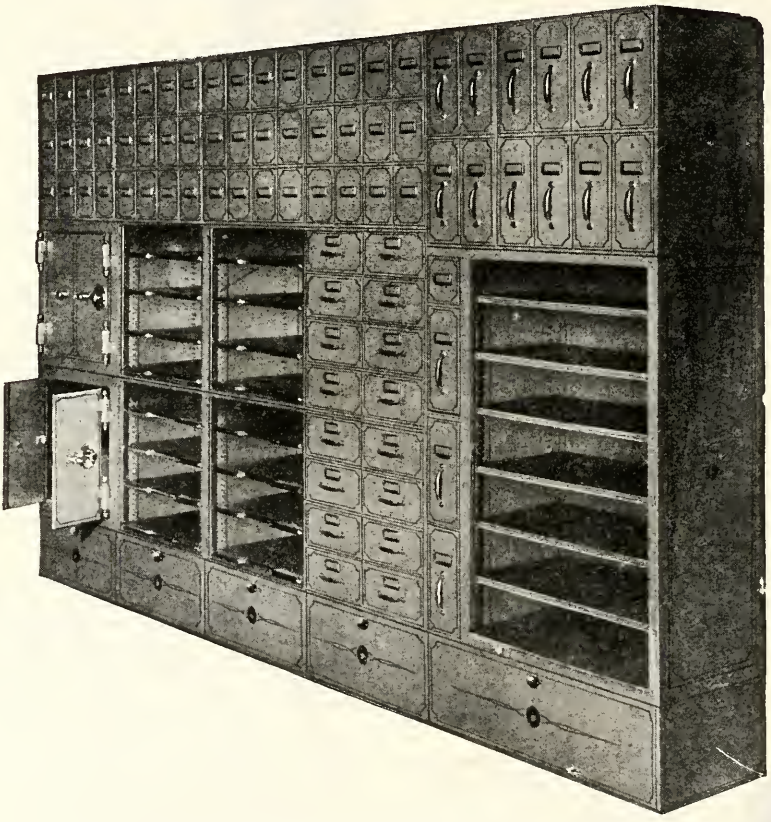

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William Mitchell Law Club was organized along the same lines as the Law clubs in the older law schools. The object is to associate men from the different classes and study legal topics not adapted for classroom discussion.

Williams, Charles Allyn. Born June 4, 1877, Iowa City, Ia., A. B. and A. M., University of Iowa, Fellow in Germanics, Iowa, 1901-02; at Cornell, 1902-03; Ottendorfer-Memorial Fellow (Germanics) New York University, 1903-04; Universities of Leipzig and Berlin, 1903-05. Taught in Upper Iowa University, 1901-02. Instructor in German, 1905 to 1909. Phi Beta Kappa; Modern Language Association.

Williams Collection of Photographs and Photographic Negatives. Mr. Arus Williams, of Minneapolis has given to the University his extensive collection of negatives and photographs. During many years of active work as a photographer, he has collected a series of several thousand plates representing geologic and geographic subjects, commercial views and historic scenes. These will prove of great value in illustrating the physical, commercial and political history of the state.

Williams, Florence, copy holder, office of the registrar, since 1913.

Williams, Grace Irene. Born West Shelby, N. Y.; American ancestry; B. S. in education, Teachers' college, Columbia university, '10; instructor in domestic science, 1913 to date; taught in rural schools, 1898-1900; science in secondary schools, 1900-08; instructor in domestic science Milwaukee Downer college, 1910-13; had been elected assistant professor at that institution for the following year.

Williams, Henry L. Dr. Henry L. Williams came to the University in the fall of 1900, under a three-year contract, to coach the football team; the renewal of his contract for various periods, since that time, has always been a matter of course, and at the present time (1913) his contract has two years yet to run. Under his coaching Minnesota has not only turned out some wonderful scoring machines, but some wonderful teams, considered from any point of view. Since his coming Minnesota has always been near the head of the list of western teams, when not actually leading, and has never, until the season of 1907, lost more than one game any season. Dr. Williams has also been connected with the college of medicine and surgery since 1901, holding various titles, as follows: Assistant in medicine, 1901-02; clinical instructor in diseases of women, 1902 to 1912; assistant professor of gynecology to 1913. He ranks as a full professor on account of his rank as director of athletics.

Williams, John G., Duluth, appointed regent, 1913, to succeed Henry B. Hovland, resigned. Term expires in 1914.

Williams, J. J., instructor in agricultural chemistry, 1913.

Williams, Milton, M., Little Falls, appointed in 1910 to succeed Sidney M. Owen, deceased. Reappointed in 1913 and term expires in 1919.

Williams, Robert, clinical assistant in medicine, 1910-13.

Williams, R. H., assistant professor animal husbandry, 1911-12.

Williamson, Alonzo Potter, professor of mental and nervous diseases and lecturer on skin and venereal diseases, College of Homeopathic medicine and surgery, 1890-94; dean and professor of mental and nervous diseases, same, 1894-95; also medical jurisprudence, 1895-1904; resigning to remove to California in 1904. See first edition.

Williamson, W., assistant in entomology, 1911 to date.

Willis, Hugh Evander. Born February 27, 1875, Stratton, Vt.; New England ancestry; m. Esther L. De Coster, '99; quiz master school of law, 1902-06; assistant professor of law, 1906 to date; A. B., Yankton, '97; A. M. '99; L. L., B., Minn., '01, L. L. M., '02; experience as teacher, in the lumber business and in scientific farming; research work, History of the action of assumpsit, Hebrew law, liability of bailees; publications, Willis on contracts, Willis on damages, Farmer's manual of law and law articles for Harvard law review, Columbia law review, American law review, Central law journal, Standard encyclopedia of procedure, and the Twentieth century magazine; public lecturer on law reforms, and on regulation of public service companies; member Alpha Delta Phi, Phi Delta Phi, Campus club, Saturday lunch club; Congregationalist.

Willis, John W. Born July 12, 1854, St. Paul, B. A., 1877, and M. A., Dartmouth, 1886; admitted to bar 1879; district judge, 2d district, 1892-98. Special lecturer on ancient, medieval and modern lawyers, college of law, 1907 to date.

Wills, Lewis E., assistant in serum preparation and instructor in physiology, 1911 to date.

Wilson, Archie Dell. Born December 3, 1875, Hastings, Minn. District school; University school of agriculture; B. Ag., University, 1905. Ten years' practical farming experience; foreman of the University farm for three years, 1900-02; instructor in school of agriculture, 1902 to date; instructor in farm management, college of agriculture, 1905 to 1907. Assistant in agriculture, 1905-1909. Superintendent of Farmers' Instiutes, 1907 to date. Chief of

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the extension division of the department of agriculture, 1912-. Author of Experiment Station bulletin, 95, on Weeds.

Wilson, Alva. Born at Bolckow, Mo.; attended University of Nebraska; M. D., Eclectic medical institute, Cincinnati, O.; engaged in practical farming for five years; agriculturist in high school at Graceville, Minn., for two years; instructor in beef, swine and poultry, Morris school of agriculture.

Wilson, Horace B., St. Paul. Regent ex-officio, as superintendent of public instruction, from August 1, 1870 to April 2, 1875.

Wilson, James, preceptor of boys' dormitory, Crookston school of agriculture, 1906-1908.

Wilson, Louis B., senior demonstrator in pathology, 1898-04; assistant professor of bacteriology, 1904-06; assistant professor of clinical pathology, 1906 to 1913; pathologist St. Mary's Hospital (The Mayo's), Rochester, Minn.

Wilson, Thomas, St. Paul. Appointed regent September 6, 1898, reappointed in 1903 and 1910; died April 3, 1910.

Wiltgen, Edward W., instructor in military science and tactics, 1899-1900, in charge of the department for a time.

Winchell, Newton Horace. Born December 17, 1839, North East, N. Y. Became connected with the Michigan geological survey in 1860; University of Michigan, 1866; superintendent of Adrian, Mich., schools, 1866-69; assistant state geologist, Michigan, 1869-70; assistant on geological survey of Ohio, 1870-72; state geologist of Minnesota, 1873-00; instructor in geology and mineralogy, 1872-73; professor same, 1873-90. Member of the United States Assay Commission, 1887; Fellow of the American Association for the Advancement of Science and vice-president, 1884; president of the geological Society of America, 1902; councillor of the Minnesota State Historical Society; Sons of the American Revolution; Society de Min. Francaise; New York Academy of Sciences; founder and three times president of the Minnesota Academy of Science; Society Geologique de Belge; National Geographical Society; American Anthropological Association; Quivira Historical Society; Lake Superior Mining Institute; Washington Academy of Science; Founded and edited the American Geologist, 1883-1905. Author of catalog of plants of the state of Michigan; Geological reports of the surveys of Ohio and Minnesota; the Iron Ores of Minnesota (with H. V. Winchell); and many papers for various geological and other magazines of the country. At present engaged upon the Archaeology of Minnesota, for the Minnesota Historical Society.

Winchell Library of Geology. This library was presented to the University October 17, 1911, by Professor Newton H. Winchell, formerly of the University department of geology. The gift was conditioned by the promise of the regents to keep the same together, to provide for its proper care and registration, and that serial publications which have been subscribed for in the past be continued and become a part of this library, and that the entire collection be known as the Winchell library of geology.

Wines, Walter E., superintendent of grounds and buildings, August, 1909, to March, 1910.

Winslow, J. M., St. Anthony. Regent 1857-1860.

Winsted, Huldah Lucile, scholar in geology and mineralogy, 1911-12.

Wischkaemper, Richard, instructor in German, 1909 to date.

Witchie, Hazel May, theme clerk in department of rhetoric, 1911 to date.

Witham, Carl Albion, clinical assistant in rhinology and laryngology, 1911-13.

Woman's Athletic Association. Organized in — to promote the interests of the women students of the University in athletics.

The Woman's League was established in January, 1901. Membership is open to all women of the University, including wives and daughters of faculty members. There are usually about 400 enrolled. Its purpose is to be helpful to the women students of the University and its activities are concerned chiefly with their social life, but it is always ready to further any movement for the welfare of the women of the institution. The society holds parties, sunlight dances and receptions, and in general promotes friendship and a spirit of good fellowship among all women students. As its purpose is to serve the highest interests of the women of the University, it is always ready to adapt itself to changing conditions. Went out of existence with the organization of the Women's Self Government Association in 1913.

The Women's Self Government Association was organized in April, 1913. This association takes upon itself all of the functions previously performed by the Woman's Council, The Woman's League and the Student Government Association.

Wood, Douglas F., clinical assistant in rhinology and laryngology, 1911-13.

Wood, George W., professor of dieases of the nervous system and medical jurisprudence, 1883-1887.

Woodbridge, Frederick J. E., professor of philosophy and head of department, 1894-1901. Now at Columbia University. See first edition.

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Woodman, Arthur. Born at Russell, Iowa; B. C. E., Ames; has had experience as draughtsman for the C. C. W. Ry., as engineer at the experiment station of Iowa state college, and with the Mississippi River Jroner Co.; agricultural engineering at Morris school of agriculture since 1912; has also done expert work in farm machinery and managed an implement business.

Woodrow, Herbert. Born February 25, 1883, Chillicothe, Ohio; Scotch English ancestry; instructor in psychology, 1909- 12; assistant professor of psychology, 1912 to date; A. M., Michigan, '04; Ph. D., Columbia, '09; Paris, 1904-05; demonstrator in experimental psychology, Princeton, 1906-07; lecturer in experimental psychology, Columbia, 1907-09; research work in the measurement of attention, Olfactory adaptation and new olfactometric methods; has published a number of technical articles in rhythm, reaction time and mental measurements; member American psychological association, Sigma Xi, Beta Pi; Presbyterian.

Woodruff, Theresa, instructor in domestic science, Crookston school of agriculture 1906-1907.

Woods, Albert Frederick. Born Belvidere, Ill., December 25, 1866; American ancestry; m. Bertha Gerneaux Davis; one son; dean and director of the department of agriculture from 1910 to date; B. S. C., Nebr. '90; A. M., same, '93; assistant in botany, Nebraska, 1890-93; assistant chief and chief pathologist division vegetable pathology and bureau of plant industry U. S. department of agriculture, 1893-1910; member special commission appointed by President Roosevelt to reorganize government business methods; delegate representing the U. S. government to found international institute of agriculture at Rome, Italy, 1905; delegate representing U. S. government to international botanical congress, Vienna, Austria, 1905; research work in plant physiology, pathology and bacteriology; publications, diseases of plants in encyclopaedias, bulletins and official reports and publications of the U. S. department of agriculture and in various scientific journals; member State forestry board, board of directors Minn. association for prevention and relief of tuberculosis, executive committee of the boy scouts of Minnesota, Soc. prom. agric. soc., Bot. Soc. America, Bot. soc. Germany, American breeders association, Bot. soc. Washington, Phytopathological soc., Soc. morph. and physiology, National geographic soc., Cosmus club Washington, fellow A. A. A. S.; Congregationalist.

Worth, Lynne G., law cataloger, 1911 to date.

Woolnough, James Barton. Born October 2, 1879, Dubuque, Ia.; English and Dutch ancestry; m. Elsie N. Kopper; one son and one daughter; student University of Minnesota, 1898-99; commandant of cadets, 1912 to date; graduate West Point, 1904; four years in the Philippines, including one year Samar campaign; attends the Episcopal church.

Works, George Alan. Born May 14, 1877, at Augusta, Wis.; American ancestry; m. Saidee B. Couper; three daughters; assistant professor of agricultural education; B. Ph., Wisconsin, 1904; M. S. in agriculture, 1912; ten years' experience in public schools, six of which were spent as superintendent of schools at Menomonie, Wis.; instructor in agricultural education at Wisconsin, 1912-13; member Phi Beta Kappa, National Educational association, Wisconsin state teachers' association; Congregationalist.

Wrestling, as an organized sport, began in the fall of 1909, when a club was organized. The first intercollegiate meet in which the University was represented was held April 16, 1910—Minnesota winning first place in every event in which an entry was made. In 1911 Minnesota took three third places and one first place; in 1912 Minnesota won the meet and in 1913 tied with Illinois for first place.

Wright, Charles B., clinical assistant in diseases of children, 1907-08; clinical instructor in pediatrics, 1909 to date.

Wright, Franklin Randolph. Born June 15, 1866, Canton, Ill.; lecturer on anaesthesia and chief of the anaesthetic clinic, 1895 to 1907; instructor in dermatology and genito-urinary diseases, 1900 to 1909; clinical professor of genito-urinary diseases to 1913; assistant professor, same, 1913-. D. D. S. '90, M. D. '94, Minnesota; member Hennepin Co., State and American medical associations; American Urological association, Academy of medicine.

Wulling, Frederick John. Born 1866, Brooklyn, N. Y., educated in public and high schools of Carlstadt, N. J., 1883; business college, 1884; Columbia University, 1884-88; New York College of Pharmacy, graduate 1887; Phm. D., 1893; LL. B., University, 1896; LL. M., same, 1898; pursued graduate work in Europe. Assistant and quiz master in pharmacology, New York college of pharmacy, 1886-90; professor of organic pharmaco-diagnosis, Brooklyn College of Pharmacy, 1891-92; dean of the college of phar-

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macy and professor of pharmacology and director of the University medicinal plant gardens to date. Member of the Minnesota State Pharmaceutical association and chairman of scientific section from 1905 to date; American conference of Pharmaceutical faculties; American Pharmaceutical Association and association council, 1902 to date and chairman of publication committee; president of the Northwestern Branch American Pharmaceutical Association; American Chemical Society; Chemists club, New York; fellow of A. A. A. S.; Minneapolis Society of Fine Arts; author of Medical and Pharmaceutical chemistry, 2 Vols.; Evolution of Botany; contributor to various technical journals.

Wyman, James T., Minneapolis. Appointed regent February 18, 1901 for a term which expired in 1902. Held office under the provision of "until successor shall be appointed" until March, 1907, when a special act of the legislature fixed his term as expiring March, 1908. President of board from date of death of Greenleaf Clark, December, 1904.

Wyman Prize, The. An annual prize of fifty dollars, offered by the Honorable James T. Wyman, of Minneapolis, through the department of political science, for the best essay of three to five thousand words by an undergraduate student on a subject to be announced by the donor each year. Awarded, in 1902, to H. E. Peterson for an essay on the "Small producer and the trust" in 1903, to Allen R. Brown, for an essay upon "The trade union as a factor in production"; in 1904 to E. C. Parker, for an essay upon "The labor question in farming communities"; in 1905 no award; in 1906 was not awarded; in 1907, to Donald C. Babcock, for an essay upon "The influence of immigration upon the development of the northwest." No record of award since 1907.

Yale, William H., Winona. Appointed regent August 9, 1894, and served until he became member of the state senate in January, 1895. Born at New Haven, Conn., in 1831. Received a common school education and engaged in business. Came to Minnesota in 1857 and practiced law. Elected county attorney in 1860, and to the state senate in 1866. Lieutenant Governor of Minnesota, 1869-71.

Yates, J. L., classification clerk, business office, 1912 to date.

Yattaw, William H., janitor, 1886-1893.

Yeager, Fred S., instructor in crown and bridge work, 1903-1908.

Young, Alice, instructor in English, 1895-1900. Graduate of the University, class of 1896.

Young, Charles Nelson, student assistant in dental electricity, 1912-13.

Young, George S., lecturer on the conflict of laws, 1888 to 1905. Formerly associate justice of the supreme court of Minnesota.

Young, George J. Born October 3, 1876, at San Francisco, Calif.; Scotch-Irish and English-Spanish ancestry; m. Wayman Atterbury; one daughter; professor of mining, 1913; B. S. in mining, California, '99; miscellaneous professional experience in mine examination; in charge of state mining laboratory of Nevada for thirteen years; in charge for a year and a half of the government co-operative laboratory for potash investigations in Great Basin Region; professor of mining and metallurgy, University of Nevada and in charge of Mackay School of mines; research work in mine ventilation, fire prevention, slime filtration and cyanide process; geology of Nevada and occurrence of Potash in the Great Basin Region; publications in Transactions of American Institute of mining engineering, papers on Mine Ventilation Fires in Metalliferous mines and Slime Filtration; member American Institute of Mining Engineers, Mining and Metallurgyical Society of America, Seismological society of America.

Young, Jeremiah S. Born September 9, 1866, Ohio; American ancestry; m. Katherine Bergh; one daughter; assistant professor of extension work in economics and political science, 1909-10; transferred to regular day work in political science, 1910; A. B., Kansas, '90; A. M., Michigan, '98; Ph. D., Chicago, 1902; research work in the history of Cumberland Road government of Colorado, '97, Cumberland road, '04, government of Minnesota, '05; member American Political science association; Methodist.

Young Men's Christian Association was established February 12, 1887. It has a membership of 585. Since 1897 it has employed a general secretary, who devotes his whole time to furthering the interests of the association, which include the promotion of growth in grace and Christian fellowship and aggressive Christian work for and by students, and the fostering and developing of a spirit of Christian service. Its activities include the holding of religious meetings, Bible and mission study courses, maintaining club rooms and assisting in the social life of the men of the institution and doing extension work in the city and the state. In association with the Young Women's Christian Association it conducts weekly vesper services in chapel, issues a student handbook and employs a religious work director. The following have served as general secretary of the association since such an officer was first employed: Linn T. Savage, 1897-00; James H. Nicol, 1900-01; Perry O. Hanson, 1901-03; Peter Hanson, 1903-06; John F. Sinclair, 1906-09; Thomas H. Graham, 1909-1912; Frederick H. Blair, 1912-13; Henry J. Doermann, 1913-14.

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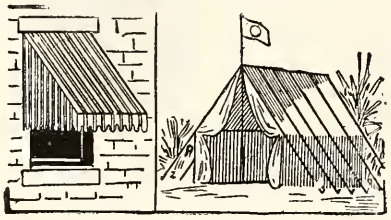

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Young Men's Christian Association, Department of Agriculture. In the spring of 1913 this association secured pledges for $1,500 for the purpose of employing a general secretary to give his whole time to the work of the association. The association has offices in the Home building.

Young Women's Christian Association was established February 28, 1891. It has a membership of 432. Any woman student in the University may become a member. Active membership is confined to those who are members of Protestant churches. Others may be associate members. The purpose of the association is to give the college woman intellectual help, social enjoyment, personal friendship and spiritual inspiration. It maintains branches of work to assist new girls in helping them get started in college, holds socials for all college girls, provides courses in mission study, Bible study, social service work and weekly religious meetings. at the same time co-operating with the social agencies of Minneapolis. The University association is a branch of the national organization which is composed of 660 student associations in the United States. It maintains a paid secretary, who devotes her whole time to the work of the Association. The following named persons served as secretary of the association: Estelle H. Bennett (Mrs. Boot), 1897-99; Ada B. Hillman, 1899-1903; Mary F. Sanford (Mrs. Morison), 1903-05; Edna Jeraldine Brown, 1905-06; Ada B. Hillman, 1906-07; Margaret Burton, 1907-08; Leila Albrecht, 1908-09; Elizabeth Bruchholz, 1909-12; Alice Anderson, 1912 to date.

Xi Psi Phi. Dental fraternity. Phi chapter established in 1905.

Zabel, Hartie Emil, scholar in comparative philology, 1912-13.

Zeches, Georgia, scholar in geology and mineralogy, 1911-12.

Zeleny, Anthony. Born April 20, 1870, Racine, Wis.; Bohemian ancestry; m. Mattie L. Day; two sons; scholar in physics, 1895-1907; instructor in physics, 1897-1906; assistant professor of physics, 1906-09; professor of physics, 1909 to date; B. S. '92; M. S., '93; Ph. D., '07; graduate work at Chicago, summer of 1900, at Goettingen, summer of 1912; experience in high school, 1904-05; inventor of an electric thermometer system for measuring the temperature of grain in storage, and an electric moisture-meter for measuring the amount of moisture in corn; research work in the capacity of electric condensers and telephone cables, absorbed electric charges, temperature measurements with thermo-electric couples, precision measurements with moving-coil galvanometer, self induction; has published with H. A. Erikson a manual of physical measurements; member American physical society, Society for the promotion of engineering education, Sigma Xi, fellow A. A. A. S.

Zeleny, John, born March 26, 1872, Racine, Wisconsin; Bohemian ancestry; m. Carolyn Scheetz Rogers; two daughters; instructor in physics, 1892-97; assistant professor, 1897-1901; associate professor, 1901-08; professor, 1908 to date; head of department since 1909; acting dean of the graduate school, 1912-13; B. S., Minn., '92; B. A. in research, Cambridge, England, '99; Ph. D., Minn., '07; research work, mainly on topics in connection with ions in gases; also low temperature work and resistance in fluids; author of accounts of research published in various technical magazines; associate editor of the Physical Review; member Phi Beta Kappa, Sigma Xi, American physical society, American association for advancement of science (fellow), associate member Cambridge philosophical society.

Zelner, Otto S., born October 16, 1877, Kent Co., Michigan; German ancestry; m. Flora McGill Thomson; two daughters; assistant professor of surveying since January, 1910; B. S. in civil engineering, Mich., '05; five years professional experience in government and power development surveys, taught in the University of Michigan summer surveying school in 1905; three years in hardware and lumber business before graduation from Michigan; has published, "Hydraulic channel at Niagara Falls," and has in preparation, "Base line measurement under water"; member Detroit Eng. society, University of Minnesota Eng. society, honorary member Theta Tau; Presbyterian.

Zeta Psi. Alpha Beta chapter established in 1899. Founded at New York University in 1847.

Zierold, Arthur Adelbert, instructor in oral surgery, 1910 to date.

Zimmerman, Harvey B., assistant in surgery, 1913-.

Zimmerman, James, instructor in chemistry, 1906-07.

Zoological Survey. See Geological and Natural History Survey.

Zoology Museum. All the material collected by the state zoologist; a collection of mounted Minnesota birds representing about one-third of the species found in the State; a number of the mammals of the State and a few from the more western states; a collection of fishes, molluscan shells, Philippine Island corals and other foreign material.

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Zuehl, Benjamin Franklin, scholar in philosophy and psychology, 1912-13.

Zuppinger, H. K., special lecturer on merchandising, 1913.

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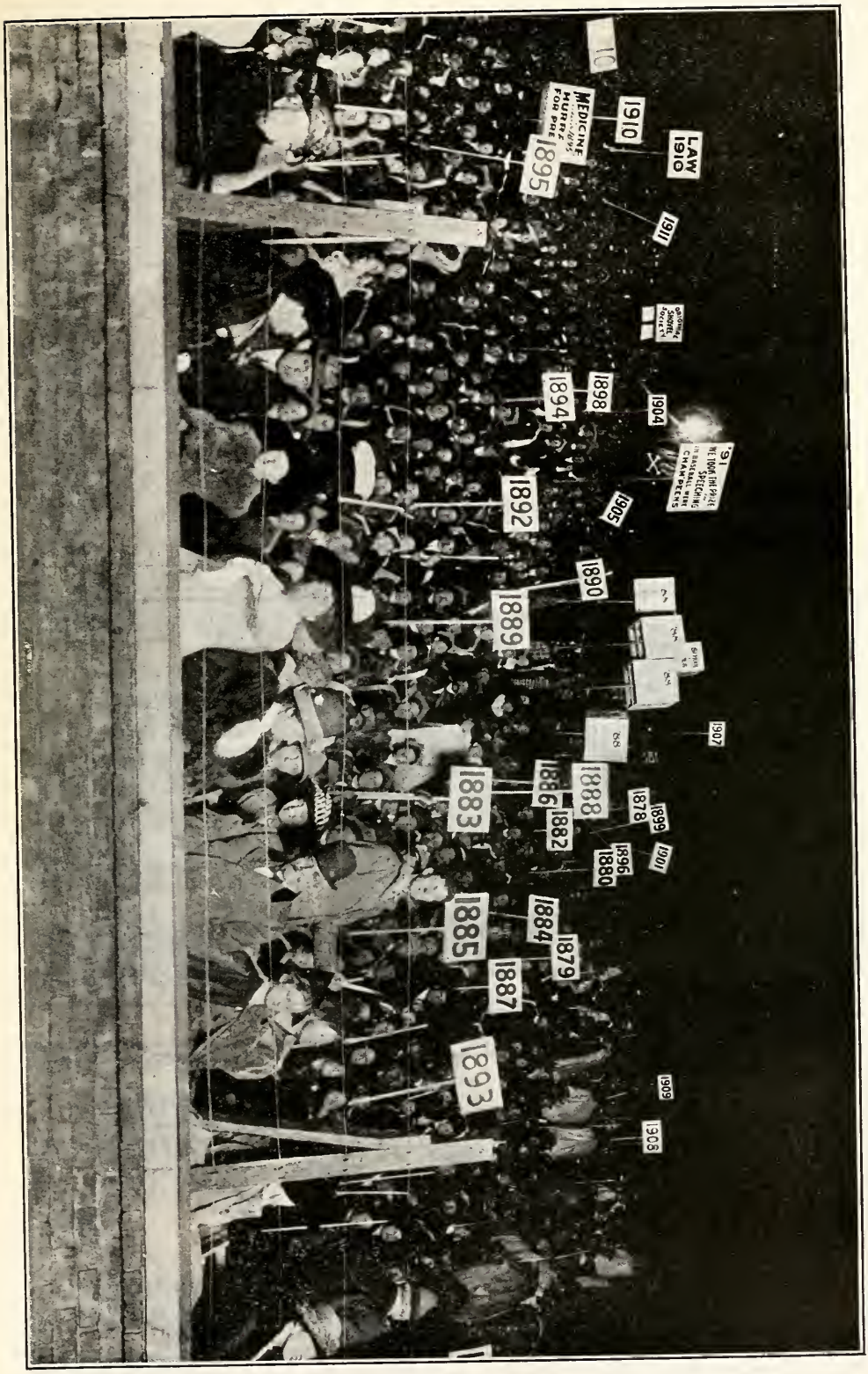

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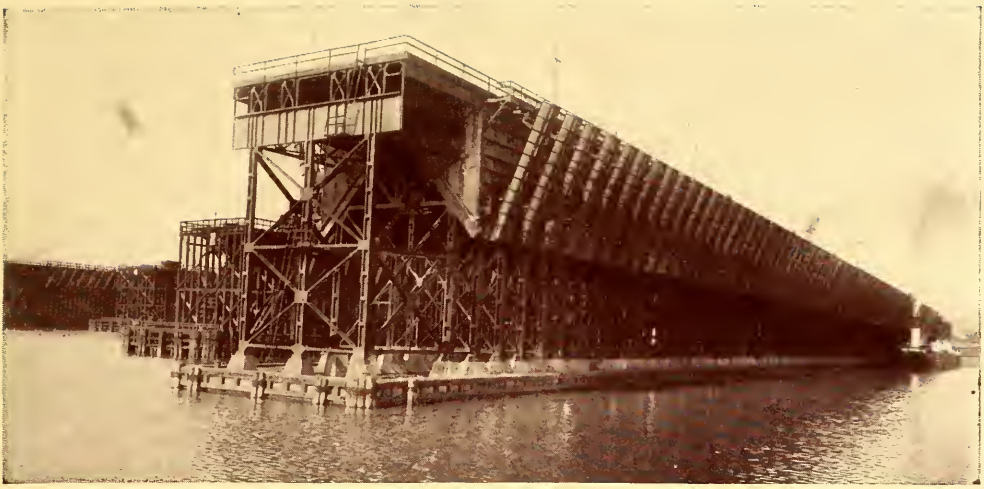

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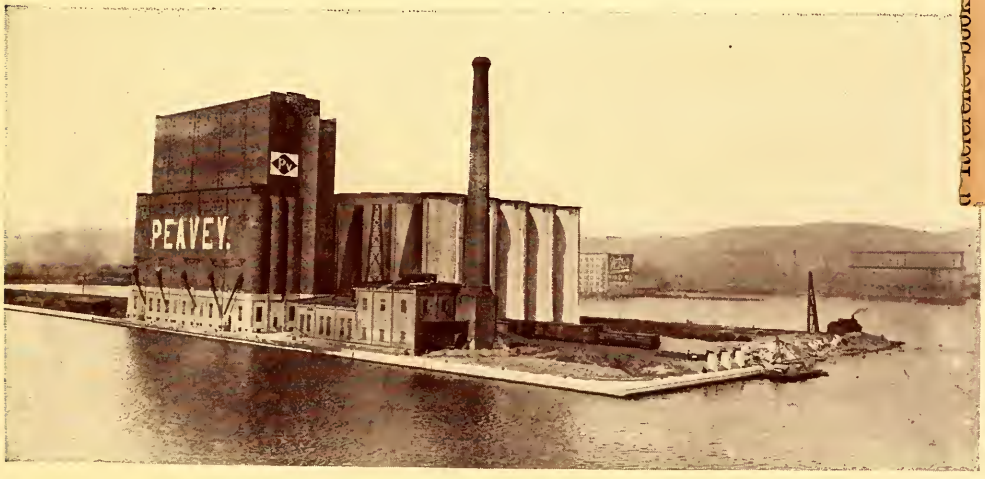

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